UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

OFFICE OF ADMINISTRATIVE LAW JUDGES

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In the matter of:

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PUBLIC HEARING ON COLLISION OF TWO WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY TRAINS NEAR FORT TOTTEN STATION, WASHINGTON, D.C., JUNE 22, 2009

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National Transportation Safety Board 490 L'Enfant Plaza East, S.W. Washington, D.C. 20694

Tuesday, February 23, 2010

The above-entitled matter came on for hearing, pursuant to Notice, at 8:59 a.m.

BEFORE: BOARD OF INQUIRY

National Transportation Safety Board (NTSB)

APPEARANCES:

Board of Inquiry

ROBERT SUMWALT, Chairman

JAMES RITTER, Acting Director, Railroad, Pipeline and
Hazardous Materials Investigations

JOSEPH KOLLY, Director, Research and Engineering
ED DOBRANETSKI, Hearing Officer/Investigator-in-Charge
GARY HALBERT, General Counsel

Technical Panel

STEVE KLEJST, Operations/Oversight
RICK DOWNS, Crashworthiness
CY GURA, Track/Engineering
RUBEN PAYAN, Signal and Train Control
RICK NARVELL, Human Performance
DANA SANZO, Survival Factors
DAVE WATSON, Mechanical
PAT SULLIVAN, Safety Recommendations
JAMES SOUTHWORTH, Chief, Rail Division
MARK JONES, Deputy Chief, Rail Division

Interested Parties

MICHAEL TABORN

Washington Metropolitan Area Transit Authority (WMATA)

MICHAEL FLANIGON

Federal Transit Administration (FTA)

THOMAS McFARLIN

Federal Railroad Administration (FRA)

ERIC MADISON

Tri-State Oversight Commission (TOC)

NEAL ILLENBERG

Alstom Signaling, Inc.

ROBERT PASCOE

Union Switch and Signal Inc.

ANTHONY GARLAND

Amalgamated Transit Union (ATU)

LAWRENCE SCHULTZ

Washington D.C. Fire and EMS Department

Free State Reporting, Inc. (410) 974-0947

APPEARANCES (Cont.):

Interested Parties (Cont.)

JACKIE JETER Amalgamated Transit Union

Also Present

DEBORAH HERSMAN, Chairman, NTSB
CHRISTOPHER HART, Vice Chairman, NTSB
ELIAS KONTANIS, Office of Transportation Disaster
Assistance
BRIDGET SERCHAK, Public Affairs Specialist, Office of
Public Affairs
NANCY MASON, Administrative Support
DENISE WHITFIELD, Administrative Support

Witness Panel 1

JOHN B. CATOE JR., General Manager, WMATA DAVID KUBICEK, Assistant General Manager, WMATA MIKE TABORN, Acting Chief Safety Officer, WMATA PETER BENJAMIN, Chairman, Metro Board, WMATA

Witness Panel 2

HARRY HEILMANN, Retired, Former Assistant Chief Engineer/Project Manager, WMATA DAVID KUBICEK, Assistant General Manager, WMATA MIKE HILLER, Chief Vehicle Engineer, WMATA ALAN G. NABB, Superintendent, Communications, WMATA

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1 PROCEEDINGS 2. (8:59 a.m.)If I could ask everyone to take your CHAIRMAN SUMWALT: 3 4 seats, we'll begin in one minute. 5 Good morning, ladies and gentlemen. My name is Robert 6 Sumwalt, and I'm a board member with the National Transportation 7 Safety Board, and it is my distinct pleasure and honor to serve as 8 the Chairman of the Board of Inquiry for this public hearing. 9 Today we are opening a public hearing concerning the 10 June 22, 2009 accident involving the collision of two Washington Metropolitan Area Transit Authority, or WMATA, trains on the Red 11 Line near Fort Totten Station in Washington, D.C. 12 13 This hearing is being held for the purpose of 14 supplementing the facts, conditions and circumstances surrounding the accident. This process will assist the Safety Board in 15 determining the probable cause of the accident and in making any 16 recommendations to prevent similar accidents in the future. 17 18 determination of cause will be rendered during these proceedings. 19 I would like to acknowledge the family members of those who have lost their lives and those who survived this accident who 20 21 are in our audience today or who are viewing via webcast. behalf of the NTSB, and all of those assembled here today, I offer 2.2 our sincere condolences for your loss and for the difficulties 23

that you have endured. As we work to continue to improve safety

in our nation's rail transit system, we should keep this tragedy

24

- 1 in mind and move forward with a collective commitment to improve
- 2 safety. Our goal is to prevent this type of accident from ever
- 3 happening again.
- 4 And that's why we're here. When a transportation
- 5 accident occurs, it is the responsibility of the NTSB to find out
- 6 what happened, why it happened and then make safety
- 7 recommendations to prevent a future accident of the similar type.
- 8 A public hearing is one tool that the NTSB may use to help
- 9 complete an investigation.
- The purpose of this hearing is twofold. First, the
- 11 issues discussed during the hearing serve to assist the Safety
- 12 Board in developing additional factual information that will be
- 13 analyzed for the purpose of completing this investigation.
- 14 Secondly, this hearing also provides the opportunity not only to
- 15 the transportation community, but for the traveling public to see
- 16 a portion of the NTSB's investigative process.
- Neither I nor will any other NTSB personnel attempt
- 18 during this hearing to analyze the testimony received, nor will
- 19 any attempts be made at this time to determine the probable cause
- 20 of the accident. Such analysis and cause determinations will be
- 21 made by the full Board after consideration of all of the evidence
- 22 gathered during our investigation. The final report of the
- 23 accident, reflecting the Safety Board's analysis and probable
- 24 cause determinations will be considered for adoption by the full
- 25 Board at a public meeting in this boardroom at a later date.

- 1 Now, these proceedings tend to become highly technical
- 2 affairs, but they are an essential part of the process in
- 3 completing an investigation and in seeking to reassure the public
- 4 that everything is being done to ensure the safety of our nation's
- 5 rail transit system.
- 6 The purpose of the hearing is not to determine the
- 7 rights or liability of private parties, and matters dealing with
- 8 such will be excluded from these proceedings. I want to emphasize
- 9 that this hearing is non-adversarial. It is a fact-finding
- 10 examination.
- During the hearing, we will collect information that
- 12 will assist the Safety Board in its examination of safety issues
- 13 arising from this accident. Specifically, we will concentrate on
- 14 six specific areas. First, we'll look at WMATA's oversight of
- 15 safety. Also, today we will look at WMATA's operational actions
- 16 to address safety issues. Tomorrow, we will look at the Tri-State
- 17 Oversight Committee's overview of WMATA. We will also look at
- 18 state safety oversight of rail transit systems across the country
- 19 and, finally, tomorrow, we will be looking at federal safety
- 20 oversight of passenger rail systems. And then on Thursday, we
- 21 will be looking at high reliability organizations.
- 22 At this point, I would like to introduce my colleagues
- 23 on the Safety Board. We have the Chairman of the NTSB, the
- 24 Honorable Debbie Hersman. She is standing in the back of the
- 25 room. And we have Vice Chairman, the Honorable Christopher A.

- 1 Hart.
- Now, joining me on the Board of Inquiry, to my right, we
- 3 have Dr. Joe Kolly, the director of the NTSB's Office of Research
- 4 and Engineering. To my immediate left, we have James Ritter, the
- 5 acting DIRECTOR of the NTSB's Office of Railroad, Pipeline and
- 6 Hazardous Materials Investigations, and to my far left, Ed
- 7 Dobranetski, the Investigator-in-Charge and the Hearing Officer.
- Now, members of the Technical Panel seated over on this
- 9 side of the room, these are the NTSB's investigators who are
- 10 actively working on this investigation, each leading their
- 11 respective groups in their respective disciplines. We have Mr.
- 12 Steve Klejst, the NTSB's Operations Group and also the Oversight
- 13 Group Chairman; Rick Downs, Crashworthiness Group Chairman; Cy
- 14 Gura, Track and Engineering Group Chairman; Ruben Payan, Signal
- 15 and Train Control Group Chairman; Rich Narvell, Human Performance
- 16 Group Chairman; Dave Watson, Mechanical Group Chairman; Pat
- 17 Sullivan, Safety Recommendations; Jim Southworth, Chief of the
- 18 NTSB's Railroad Division; and Mark Jones, Deputy Chief of the
- 19 Railroad Division.
- 20 Ms. Bridget Serchak from the NTSB's Office of Public
- 21 Affairs is here to assist in matters dealing with the media.
- Mr. Elias Kontanis from the NTSB's Office of
- 23 Transportation Disaster Assistance is here to assist WMATA
- 24 accident passengers and family members during the hearing.
- Nancy Mason and Denise Whitfield are providing

- 1 administrative support as needed.
- Now let's talk about the parties to the investigation.
- 3 In the center of the room, we have the parties to the
- 4 investigation, and federal regulations provide for the designation
- 5 of parties to a NTSB public hearing. In accordance with these
- 6 regulations, those persons, governmental agencies, companies and
- 7 associations whose participation in the hearing is deemed
- 8 necessary and in the public interest are designated as parties.
- 9 The parties assisting the Safety Board in this hearing have been
- 10 designated in accordance with these regulations and they have been
- 11 selected for their technical expertise in their respective fields.
- 12 I will now call the names of the parties to the hearing,
- 13 and as I call each Party's name, I would like for the designated
- 14 Party spokesperson to please give his or her name, title and
- 15 affiliation for the record. Federal Railroad Administration.
- 16 MR. McFARLIN: Thank you. My name is Tom McFarlin. I'm
- 17 the Staff Director for the Signal and Train Control Division of
- 18 the Federal Railroad Administration located here in Headquarters
- 19 in Washington, D.C.; Party spokesman for FRA.
- 20 CHAIRMAN SUMWALT: Thank you, Mr. McFarlin. Federal
- 21 Transit Administration.
- 22 MR. FLANIGON: Good morning. Mike Flanigon, F L A N I G
- 23 O N. I'm the Director of the Office of Safety and Security for
- 24 the Federal Transit Administration.
- 25 CHAIRMAN SUMWALT: Good morning, Mr. Flanigon, and thank

- 1 you. Tri-State Oversight Committee.
- MR. MADISON: Good morning. My name is Eric Madison.
- 3 I'm the Chair of the Tri-State Oversight Committee.
- 4 CHAIRMAN SUMWALT: Thank you, Mr. Madison. WMATA.
- 5 CHIEF TABORN: Michael Taborn. I'm the Chief of the
- 6 Metro Transit Police but currently the Acting Chief Safety Officer
- 7 for the Washington Metropolitan Area Transit Authority.
- 8 CHAIRMAN SUMWALT: Thank you, Chief Taborn. Amalgamated
- 9 Transit Union.
- 10 MS. JETER: I am Jackie Jeter, President of the
- 11 Amalgamated Transit Union, Local 689.
- 12 CHAIRMAN SUMWALT: Thank you, Ms. Jeter. Washington,
- 13 D.C. Fire and EMS Department.
- 14 CHIEF SCHULTZ: Thank you, Chairman. Lawrence Schultz,
- 15 Chief of Operations for the D.C. Fire and EMS Department.
- 16 CHAIRMAN SUMWALT: Chief Schultz, thank you for being
- 17 here. Alstom Signaling, Inc.
- 18 MR. ILLENBERG: Thank you, Mr. Chairman. Neal
- 19 Illenberg, Site Safety Officer for Alstom Signaling.
- 20 CHAIRMAN SUMWALT: Thank you, Mr. Illenberg. Ansaldo
- 21 STS USA.
- 22 MR. PASCOE: Thank you. Robert Pascoe from formerly
- 23 Union Switch and Signal called Ansaldo STS.
- 24 CHAIRMAN SUMWALT: Thank you. Thank you very much.
- I want to thank publicly all of the private and

1 governmental agencies that have supported the Safety Board

- 2 throughout this investigation.
- 3 Last Wednesday, the Board of Inquiry held a prehearing
- 4 conference in this boardroom. It was attended by members of the
- 5 Board of Inquiry, by the Technical Panel and the parties to the
- 6 hearing. During that conference, the areas of inquiry and the
- 7 scope of the issues to be explored at the hearing were delineated.
- 8 As we start out this morning, Mr. Dobranetski will
- 9 summarize the facts about the accident and the investigative
- 10 activities that have taken place to date. Following this, the
- 11 first witnesses will be called.
- 12 The witnesses have been selected because of their
- 13 ability to provide the best available information on the issues of
- 14 rail transit safety pertinent to this accident investigation.
- 15 Each witness will testify under oath and will serve on panels
- 16 devoted to specific topic areas. The Technical Panel will
- 17 question the witnesses first, followed by each Party in turn
- 18 having the opportunity to question the witnesses, and the Board
- 19 Inquiry will be the last to question the witnesses.
- 20 As Chairman of the Board of Inquiry, I will be
- 21 responsible for the conduct of the hearing. I will make
- 22 determinations on the admissibility of exhibits and the pertinence
- 23 of proffered testimony with the assistance of the NTSB's General
- 24 Counsel, Mr. Gary Halbert, who is seated behind me. All such
- 25 rulings will be final.

- 1 The record of the investigation, including the
- 2 transcript of the hearing and all exhibits entered into the record
- 3 along with the PowerPoint presentations, will become part of the
- 4 Safety Board's public docket and will be available on the Safety
- 5 Board's website at www.ntsb.gov.
- Now, witnesses who have completed their testimony should
- 7 realize that they may be subjected to being recalled should the
- 8 need arise and, therefore, witnesses should not leave unless they
- 9 have checked with Mr. Dobranetski, the Hearing Officer.
- In closing, I ask that everyone, including myself,
- 11 please silence your cell phones and other electronic devices that
- 12 you may have with you, and also please make a mental note of the
- 13 exits from this room in the event that they are needed in the
- 14 event of an emergency.
- Mr. Dobranetski, are you ready to summarize the
- 16 investigation and enter the exhibits into the public docket?
- 17 HEARING OFFICER DOBRANETSKI: Yes, I am.
- 18 CHAIRMAN SUMWALT: Please proceed.
- 19 HEARING OFFICER DOBRANETSKI: Good morning, Member
- 20 Sumwalt and members of the Board of Inquiry. I am Ed Dobranetski
- 21 from the Office of Railroad, Pipeline and Hazardous Materials
- 22 Investigations, and was the investigator-in-charge for this
- 23 accident.
- This presentation is of the Board's investigation of the
- June 22, 2009 accident on the Washington Metropolitan Area Transit

- 1 Authority. On Monday, June 22 at about 4:58 p.m., the Washington
- 2 Metropolitan Area Transit Authority Metrorail Train 112 collided
- 3 with the rear end of stopped Train 214 near the Fort Totten
- 4 Station in Washington, D.C. Both trains were traveling inbound on
- 5 the Red Line segment of the Metrorail System towards Metro Center.
- 6 District of Columbia Fire and Rescue reported 9 fatalities and
- 7 transporting about 52 persons to local hospitals.
- 8 This slide was taken on the day of the accident and is a
- 9 view looking towards the Fort Totten Station.
- 10 Train 214 had stopped before entering the Fort Totten
- 11 Station due to a loss of speed commands and that another train
- 12 already was occupying the station platform. Train 112 was
- 13 following Train 214 and, according to passenger statements from
- 14 Train 112, the train operator announced they were stopping because
- 15 there was a train ahead. They stated they initially slowed,
- 16 stopped and then began moving and collided with the rear end of
- 17 Train 214. There was no communication between the operators of
- 18 Train 112, the stopped Train 214 or the Metrorail Operations
- 19 Control Center before the collision.
- 20 This slide shows the result of the collision with the
- 21 last car of Train 214 penetrating about 50 feet into the lead car
- 22 of Train 112 and the lead car of Train 112 overriding or
- 23 telescoping the last car of Train 214.
- 24 The stopped train, 214, was a six-car train in passenger
- 25 service consisting of two two-car sets of 3000 Series transit

- 1 railcars and one two-car set of 5000 Series transit railcars,
- 2 operated in the manual mode by one train operator. The striking
- 3 train, 112, was a six-car train in passenger service consisting of
- 4 three two-car sets of 1000 Series transit railcars, operated by
- 5 one train operator in the automatic mode. Damage to the train
- 6 equipment is preliminarily estimated by WMATA to be in excess of
- 7 \$12 million.
- 8 This slide shows the rear car of Train 214 with the lead
- 9 car of Train 112 telescoped.
- 10 This slide shows a line controller at WMATA's downtown
- 11 Operations Control Center, referred to as the OCC. Two
- 12 controllers per line interface with train operations while seated
- 13 at displays that replicate train movements. Displays use
- 14 information generated wayside by the automatic train control
- 15 system, sensors at stations and other significant locations, such
- 16 as intrusion alarms, et cetera. Color displays show train
- 17 movements and wayside information. Displays include train
- 18 locations, directions of travel, modes of operation, whether in
- 19 automatic or manual, and incoming alarm messages. The wayside
- 20 automatic train control system transmits speed commands to trains
- 21 sitting on the track.
- 22 During the automatic mode, the train control system
- 23 operates the train within the limits of the speed commands. In
- 24 the manual mode, the operator controls the train speed within the
- 25 limits established by the speed commands. Automatic train

1 protection is in use during both manual and automatic operations.

- 2 Train control rooms are located at each WMATA train
- 3 station and contain the automatic train protection, automatic
- 4 train stop and automatic train operation equipment. The track
- 5 circuit modules associated with the various track circuits that
- 6 lie within the train control room area are mounted on metal racks
- 7 inside the train control room. Each automatic train protection
- 8 transmitter-receiver module contains a track and train frequency
- 9 transmitter and a track frequency receiver. The track circuit is
- 10 configured with two track circuit modules that use the transmitter
- 11 from one module to communicate with the receiver of the second
- 12 module. The automatic train protection transmitter-receiver
- 13 modules are original equipment installed in the 1970s when the Red
- 14 Line was constructed.
- This slide shows a typical impedance bond located at one
- 16 end of the track circuit. The track circuits have an impedance
- 17 bond at each end of the track circuit.
- This slide shows a typical track circuit module with a
- 19 transmitter and a receiver for each track circuit.
- The investigation of this accident has raised concern
- 21 regarding audio frequency track circuits and the configuration and
- 22 performance of electronic components used by the automatic train
- 23 protection system. During testing to determine the source of
- 24 parasitic oscillations, the investigation found that isolating the
- 25 track circuit modules from the metal rack or improving the

- 1 insulation between the transistor and the heat sink interrupted
- 2 the alternate unintended signal path. Installing a resistor in
- 3 series on the base of each transistor prevented the parasitic
- 4 oscillations. Further, replacing a capacitor using the power
- 5 transistor circuit reduced the parasitic oscillations.
- 6 The Safety Board issued two urgent safety
- 7 recommendations on July 13, 2009: One to WMATA, to provide for
- 8 real-time monitoring of the track occupancy data as a safe
- 9 redundancy of the ATC system to automatically generate alerts to
- 10 prompt action to immediately stop trains or implement appropriate
- 11 speed restrictions to prevent collisions. This recommendation is
- 12 open acceptable.
- 13 Another urgent safety recommendation went to the Federal
- 14 Transit Administration to advise other transit systems of this
- 15 accident and for them to determine if their systems have adequate
- 16 safety redundancy to prevent an accident in the event of a loss of
- 17 train detection and take corrective action. This recommendation
- 18 is also open acceptable.
- On September 22, 2009, the Safety Board issued
- 20 additional urgent safety recommendations: R-09-015, to WMATA to
- 21 examine track circuits within their system that may be susceptible
- 22 to parasitic oscillations and spurious signals capable of
- 23 exploiting unintended signals paths, and eliminate those adverse
- 24 conditions that could affect the safe performance of the train
- 25 control system. This work should be conducted in coordination

- 1 with the signal and train control equipment manufacturers. This
- 2 recommendation has not been classified.
- 3 Two urgent safety recommendations each were issued to
- 4 the Federal Transit Administration and the Federal Railroad
- 5 Administration. Another was issued to Alstom.
- 6 To the FTA and FRA was to advise rail transit operators
- 7 that the use of radio frequency track circuits in their train
- 8 control systems, that post-accident testing followed the June 22,
- 9 2009 collision between two rail transit trains near the Fort
- 10 Totten Station in Washington. Also to the FTA and the FRA, to
- 11 advise and require all rail transit operators that use audio
- 12 frequency track circuits in their train control systems to examine
- 13 track circuits that may be susceptible to parasitic oscillations
- 14 and spurious signals capable of exploiting unintended signal paths
- 15 and eliminate those adverse conditions.
- 16 To Alstom, they were to assist the Washington
- 17 Metropolitan Area Transit Authority and other rail transit
- 18 operators and the railroads to eliminate those adverse conditions
- 19 that could affect the safe performance of the train control
- 20 system.
- Three additional safety recommendations were issued, one
- 22 each to WMATA, the Federal Transit Administration and the Federal
- 23 Railroad Administration.
- To WMATA, they were to develop a program to periodically
- 25 determine that electronic components in their train control

- 1 systems were performing within designed tolerances.
- 2 To the Federal Transit Administration, to advise all
- 3 rail transit operators that use audio frequency track circuits in
- 4 their train control systems to develop a program to periodically
- 5 determine that electronic components in their train control
- 6 systems were performing within designed tolerances.
- 7 And to the Federal Railroad Administration, to require
- 8 all railroads that use audio frequency track circuits in their
- 9 train control systems to develop a program to periodically
- 10 determine that electronic components in their train control
- 11 systems were performing within designed tolerances.
- 12 During the on-scene investigation, the parties to the
- 13 investigation included the Washington Metropolitan Transit
- 14 Authority; the Federal Transit Administration; the Federal
- 15 Railroad Administration; the Tri-State Oversight Committee; Alstom
- 16 Signaling Inc., formerly General Railway Signal; and Ansaldo STS
- 17 USA, formerly Union Switch and Signal; the Amalgamated Transit
- 18 Union and the District of Columbia Fire Department.
- 19 Member Sumwalt and other members of the Board of
- 20 Inquiry, that concludes my opening statement.
- 21 CHAIRMAN SUMWALT: Thank you very much, Mr. Dobranetski.
- 22 Would you please call the witnesses on the first -- I'm sorry.
- 23 HEARING OFFICER DOBRANETSKI: I have to introduce some
- 24 exhibits first.
- 25 CHAIRMAN SUMWALT: Please.

- 1 HEARING OFFICER DOBRANETSKI: Introducing exhibits,
- 2 Administrative Exhibits A through P, which are technical facts or
- 3 reports and the urgent safety recommendations that we just
- 4 discussed. Exhibits for Panel 1, which will be Exhibits P1-a
- 5 through P1-k and Exhibit Q and R. Panel 2 exhibits will be
- 6 Exhibit F and L and Exhibit P2-a through P2-k. Panel 3 exhibits
- 7 will be Exhibits P1-a, P3-a and Exhibit 4 and P3-b. Panel 4
- 8 exhibits will be P1-a, P3-a and Exhibit R. Panel 5 exhibits will
- 9 include Exhibit P1-a, P5-a, P5-b and P5-c. And Panel 6 exhibits
- 10 will be from the HRO presentation.
- 11 Member Sumwalt, that is all the exhibits that have been
- 12 presented to be introduced at this time.
- 13 CHAIRMAN SUMWALT: Thank you. Are there any other
- 14 exhibits to be entered at this time?
- 15 (No response.)
- 16 CHAIRMAN SUMWALT: Thank you very much.
- 17 Mr. Dobranetski, now would you please call the witnesses on the
- 18 first panel?
- 19 HEARING OFFICER DOBRANETSKI: I'd like to call to the
- 20 stand the first panel of witnesses which will be Mr. John Catoe,
- 21 Mr. David Kubicek, Mr. Mike Taborn and Mr. Peter Benjamin.
- 22 CHAIRMAN SUMWALT: While that first panel is setting up,
- 23 that is just the issue I wanted to talk about is the microphones,
- 24 and it does work best for these microphones if you pull them very
- 25 close to your mouth. That's the best way to do it that I've found

- 1 from sitting here for a few years. So I think you'll probably
- 2 hear that repeated throughout the week. Just keep the mics close
- 3 to your mouth and speak clearly and loudly. Thank you.
- 4 HEARING OFFICER DOBRANETSKI: Now that everyone is
- 5 seated, I'll ask you to stand and be sworn in. Please raise your
- 6 right hand.
- 7 (Witnesses sworn.)
- 8 HEARING OFFICER DOBRANETSKI: Be seated. Mr. Benjamin,
- 9 for the record, would you please your name, your current employer,
- 10 your title and your company address?
- 11 MR. BENJAMIN: I am Peter Benjamin. I am the Chairman
- 12 of the Metro Transit board of directors. I am actually retired.
- 13 I'm not employed by anybody, and I live in Garrett Park, Maryland.
- 14 HEARING OFFICER DOBRANETSKI: How long have you been in
- 15 your current position?
- 16 MR. BENJAMIN: I've been Chair for less than a month.
- 17 HEARING OFFICER DOBRANETSKI: And how long have you been
- 18 a member of the WMATA Metro board?
- 19 MR. BENJAMIN: For almost three years.
- 20 HEARING OFFICER DOBRANETSKI: What are your duties and
- 21 responsibilities as a member and now as the Chairman?
- 22 MR. BENJAMIN: The Metro board is the policy-making
- 23 direction for the Metro Transit Authority. The Washington
- 24 Metropolitan Transit Authority is represented by people from three
- 25 jurisdictions, actually four jurisdictions now, the State of

- 1 Maryland, the District of Columbia, the Commonwealth of Virginia
- 2 and the U.S. Federal Government. Those people establish the
- 3 policies which the General Manager, as the Chief Executive
- 4 Officer, and all the other staff that report to him operate.
- 5 HEARING OFFICER DOBRANETSKI: Could you also please
- 6 provide a brief description of the previous positions you've held
- 7 throughout your career?
- 8 MR. BENJAMIN: Probably most significantly, before being
- 9 on the board, I was actually an employee of Metro before I
- 10 retired. For many years, I was the Chief Financial Officer. I
- 11 was also the Director of Planning for Metro. Before that, I
- 12 worked for the Federal Transit Administration as an Associate
- 13 Administrator there, including the areas of research and
- 14 development and safety. I, before that, worked with what is now
- 15 the Volpe Center on transportation research and before that in the
- 16 Apollo Lunar Program.
- 17 HEARING OFFICER DOBRANETSKI: Thank you, Mr. Benjamin.
- 18 Mr. Taborn, for the record, state your full name, your
- 19 current employer, title and company address.
- 20 CHIEF TABORN: Michael Taborn. I currently am the Chief
- 21 of the Metro Transit Police, but acting since November 23rd as the
- 22 Acting Chief Safety Officer. I report directly to the General
- 23 Manager. The address at which I work is 600 5th Street, the Metro
- 24 Transit Police Headquarters.
- 25 HEARING OFFICER DOBRANETSKI: And how long have you been

- 1 in each of these positions?
- 2 CHIEF TABORN: I started with the Washington
- 3 Metropolitan Area Transit Authority as the Metro Transit Police
- 4 since 1974, and I worked there until I retired in 2002, where I
- 5 then went over to the Federal Transit Administration and spent six
- 6 years. My first two years was working in the Office of Safety and
- 7 Security and my last four was working in that same office as the
- 8 Director of the Office of Safety and Security, and in March of
- 9 2008, I came back and accepted the position as Chief of the Metro
- 10 Transit Police.
- 11 HEARING OFFICER DOBRANETSKI: What are your current
- 12 duties and responsibilities?
- 13 CHIEF TABORN: Currently my duties are the
- 14 responsibility as the acting chief safety officer, which entails
- 15 the oversight of all safety operations, interactions with all the
- 16 departments within the Washington Metropolitan Area Transit
- 17 Authority, providing information to the general manager as well as
- 18 to the board of directors.
- 19 HEARING OFFICER DOBRANETSKI: Thank you. Mr. Kubicek,
- 20 for the record, please state your full name, your current
- 21 employer, your title and your company address.
- MR. KUBICEK: Dave Kubicek. My title is Acting Deputy
- 23 General Manager. I work for the Washington Metropolitan Area
- 24 Transit Authority. My physical address is 600 5th Street,
- 25 Northwest, Washington, D.C. The ZIP is 20001.

- 1 HEARING OFFICER DOBRANETSKI: How long have you been the
- 2 acting general manager?
- 3 MR. KUBICEK: Since December of 2009.
- 4 HEARING OFFICER DOBRANETSKI: And in your prior
- 5 position, how long were you in it?
- 6 MR. KUBICEK: Prior position, I was employed by the
- 7 agency in May of 2009. I first started out as the chief
- 8 mechanical officer here. During that time, I was promoted up to
- 9 start heading up the Rail Operations Division, and in November, I
- 10 was appointed to be head of the Transit Infrastructure and
- 11 Engineering Services.
- 12 HEARING OFFICER DOBRANETSKI: And your current duties
- 13 and responsibilities?
- 14 MR. KUBICEK: Current duties and responsibilities is I
- 15 oversee all the day-to-day operations for rail, bus, paratransit,
- 16 engineering services, also construction and billed out and capital
- 17 programs.
- 18 HEARING OFFICER DOBRANETSKI: Okay. Thank you. Mr.
- 19 Catoe, for the record, would you please provide your full name,
- 20 your current employer, title and company address?
- 21 MR. CATOE: My full name is John B. Catoe, Jr. My
- 22 employer is the Washington Metropolitan Area Transit Authority.
- 23 work at 600 5th Street, Northwest, in Washington, D.C. My title
- 24 is General Manager, and I've been in this position for three years
- 25 and one month.

1 HEARING OFFICER DOBRANETSKI: And your duties and

- 2 responsibilities as General Manager?
- 3 MR. CATOE: The duties and the responsibility as a chief
- 4 executive officer is to provide direction to all employees of the
- 5 agency in safety and operations as well as administrative
- 6 functions. I have a responsibility to report to the board of
- 7 directors on the operation of the agency, its safety conditions as
- 8 well as its financial and operating conditions. I also have the
- 9 responsibility to be the chief spokesperson for the agency in
- 10 front of governmental agencies and other private and public
- 11 authorities.
- 12 HEARING OFFICER DOBRANETSKI: Would you please provide a
- 13 brief description of positions you have held and the other duties
- 14 and responsibilities you've had prior to coming to WMATA?
- 15 MR. CATOE: Yes. Prior to coming to WMATA, for five
- 16 years, I was the deputy CEO for the Los Angeles County
- 17 Metropolitan Transportation Authority. My responsibility there
- 18 was to oversee the transit operations of the organization. Prior
- 19 to that position, for 5½ years, I was the director of Transit
- 20 Services for the city of Santa Monica, to oversee their bus
- 21 operations. And prior to that position, I spent 17 years with the
- 22 Orange County Transit Authority in Orange County, California in
- 23 various positions, one in the employment department, the marketing
- 24 department, finance, and ultimately the director of Transit
- 25 Services for that agency.

- 1 HEARING OFFICER DOBRANETSKI: Thank you. For the
- 2 record, Mr. Catoe, would you identify the representative that your
- 3 panel has?
- 4 MR. CATOE: Shiva Pant is the representative for the
- 5 panel.
- 6 HEARING OFFICER DOBRANETSKI: Okay. And your
- 7 representation that's sitting behind you?
- 8 MR. CATOE: I'm sorry. Carol O'Keeffe who is the
- 9 counsel for the Authority.
- 10 HEARING OFFICER DOBRANETSKI: Okay. And she represents
- 11 everyone on the panel?
- MR. CATOE: Yes, she does.
- 13 HEARING OFFICER DOBRANETSKI: Thank you.
- 14 Mr. Chairman, the witnesses are qualified, and I will
- 15 begin by turning the questioning over to the first panel group
- 16 which will be Mr. Klejst.
- 17 CHAIRMAN SUMWALT: Mr. Klejst, please proceed. Thank
- 18 you.
- MR. KLEJST: Thank you.
- Good morning, everyone. Before I begin my questioning
- 21 this morning, I'd like to ask the witnesses to provide your
- 22 responses to my questions based on conditions that existed prior
- 23 to June 22 of 2009.
- 24 These first series of questions I'm going to be
- 25 directing to Mr. Benjamin. What level of oversight does the board

- 1 of directors provide WMATA with respect to safety?
- MR. BENJAMIN: Mr. Klejst, our job is to establish the
- 3 broad policy and the broad direction to set goals for the general
- 4 manager and for the agency and to respond to any indications that
- 5 those broad goals are not being accomplished.
- 6 MR. KLEJST: Could you give us an example of some
- 7 specific actions that were taken by the board to provide that
- 8 level of oversight that you just described?
- 9 MR. BENJAMIN: Well, one of the things that we do on an
- 10 annual basis is establish the performance objectives for the
- 11 general manager, and therefore for the agency, and every year we
- 12 also review all of those performance objectives. During the year,
- 13 we have a safety committee which reviews information on the
- 14 current situation relative to safety and which receives reports
- 15 from the general manager and from the staff relative to any
- 16 specific issues that may be of importance.
- 17 MR. KLEJST: In the meetings that you just described,
- 18 are there any other meetings or activities that the board is
- 19 involved with that would involve meeting with either the general
- 20 manager and/or the WMATA senior management team to deal with
- 21 safety issues?
- MR. BENJAMIN: As individuals, of course, any board
- 23 member may meet with anybody on the staff and generally with the
- 24 general manager also there, but we have both public and private
- 25 meetings, if that's what you're trying to get to. We have

- 1 executive sessions as well as open sessions.
- 2 MR. KLEJST: What I'm trying to establish is the level
- 3 of communication and the level of interaction that the board of
- 4 directors has with WMATA with respect to safety issues. The
- 5 various meetings that you just described, will those meetings be,
- 6 again, with the general manager dealing with specific safety
- 7 issues or would they be dealing with overarching safety policy or
- 8 those broad policy issues that you described earlier?
- 9 MR. BENJAMIN: Generally speaking, a meeting would be
- 10 about safety performance as it relates to the broad goal which is
- 11 our number one goal of maintaining the safety of the system for
- 12 the employees, for the passengers and for the general public. In
- 13 those situations, we would get regular reports about how well
- 14 we're doing along that line, and if there are any incidents, we
- 15 get specific reports about those incidents.
- 16 MR. KLEJST: The incidents that you're referring to,
- 17 does the board of directors meet with the general manager and/or
- 18 the senior management team to discuss specific incidents such as
- 19 collisions, derailments, significant accidents on the WMATA
- 20 Metrorail system, fatal injuries to employees, or is there other
- 21 types of activity that takes place with respect to those
- 22 significant safety issues?
- 23 MR. BENJAMIN: Well, with respect to those significant
- 24 safety issues, yes, we as a board would meet, our safety committee
- 25 would meet; our Customer Service, Operations and Safety Committee

- 1 would meet; and under some circumstances, individuals within the
- 2 board may meet with individuals on the staff.
- MR. KLEJST: Now, the meetings that you would have,
- 4 would that be to alter existing policy or overall strategic
- 5 management of the WMATA organization or would that be to provide
- 6 specific safety direction to the general manager and his direct
- 7 report staff dealing with those specific issues?
- 8 MR. BENJAMIN: Again, our function is to be a policy
- 9 board, not to provide specific direction relative to particular
- 10 safety actions. So what we would be doing is reviewing this in
- 11 order to understand better whether or not the broad goals that are
- 12 established are in fact being carried out properly, and if there
- 13 seems to be an area in which additional attention is needed, we
- 14 would suggest that to the general manager.
- 15 MR. KLEJST: So would the board of directors be involved
- 16 with working with the WMATA senior management team to understand
- 17 and to obtain information with regard to the senior management
- 18 team's approach to applying, developing recommendations that may
- 19 have been made by the Safety Board or recommendations that may
- 20 have been made by other organizations or entities to address
- 21 specific accidents and incidents?
- 22 MR. BENJAMIN: If you're talking about do we get
- 23 involved before a response is given to, say, the TOC or to the
- 24 NTSB, no, we don't review that prior to that going back to those
- 25 organizations. We hold the general manager responsible for the

- 1 quality of those responses and the timeliness of those responses.
- 2 MR. KLEJST: So that I understand correctly, is it
- 3 accurate that the board of directors will understand and receive
- 4 information that a response is being prepared but the board does
- 5 not get involved with the nature of what that response is?
- 6 MR. BENJAMIN: We're generally aware of the fact that a
- 7 request has come in and that something is being done in terms of
- 8 responses, but unless there is an issue raised relative to that
- 9 response, that is not a policy issue and it would not come to us.
- 10 In some cases, for instance, one of the recommendations of the
- 11 National Transportation Safety Board had to do with replacing \$1
- 12 billion worth of railcars. That rises to a policy level where it
- 13 would come to us.
- 14 Most recently, we discovered that there were situations
- 15 in which the staff had not been responsive, and that did come to
- 16 us and we did deal with those kinds of things. But we would not
- 17 review on a routine basis every response that was going out nor
- 18 the detailed follow-up unless we had reason to believe that there
- 19 was a failure for the staff to act properly.
- 20 MR. KLEJST: Now, you've mentioned before that there was
- 21 a committee that dealt with safety issues. Could you please
- 22 describe that committee?
- 23 MR. BENJAMIN: The board is organized in a series of
- 24 committees which over time do evolve and change. At the present
- 25 time, we have four committees. One of those is Customer Service,

- 1 Operations and Safety, and that committee has the responsibility
- 2 to act as a portion of the board on detailed review of safety
- 3 issues and bring to the attention of the board as a whole any
- 4 issues that it believes are important.
- 5 MR. KLEJST: And are there any other functions performed
- 6 by that committee?
- 7 MR. BENJAMIN: Certainly, on customer service and on
- 8 operations. I'm not quite sure what you're looking for.
- 9 MR. KLEJST: Well, as far as the three areas of
- 10 responsibility: security, customer service and safety -- maybe I
- 11 could ask the question this way -- is there a priority placed on
- 12 any one of those three areas that that particular committee is
- 13 involved in?
- 14 MR. BENJAMIN: The highest priority of our Authority has
- 15 always been, is always stated as and remains safety.
- 16 MR. KLEJST: And the role again of the board would be to
- 17 provide just the overall strategic policy, quidance and direction,
- 18 as opposed to a greater level of involvement to have the board
- 19 develop a comfort level with the general manager's response to a
- 20 particular incident or a particular area of safety concern; is
- 21 that correct?
- 22 MR. BENJAMIN: If we have reason to believe that the
- 23 general manager has not done what we believe he should do, we will
- 24 meet with him and talk to him about that.
- 25 MR. KLEJST: So the board will discuss with the general

- 1 manager in a level of significant detail what a particular
- 2 response or a particular action would be with respect to a safety
- 3 issue or a safety concern on the WMATA system?
- 4 MR. BENJAMIN: Well, if, for instance, we believe that
- 5 the general manager or the staff are not acting in accordance with
- 6 what we believe is an appropriate level of safety concern, we
- 7 would then explore that in greater detail with the general
- 8 manager. But our function is to be a policy board. If anything,
- 9 our board has been criticized for being a group of micromanagers.
- 10 We try very hard to maintain that policy basis unless there's
- 11 reason to believe that we need to interfere in some way or other,
- 12 and then we try to keep that to a minimum, because that is in fact
- 13 the function of any policy board.
- MR. KLEJST: Does the board of directors receive or
- 15 obtain information as far as reports or audit results that an
- 16 entity will provide WMATA, for example, the Federal Transit
- 17 Administration or the Tri-State Oversight Committee? If there is
- 18 a audit report generated by either of those groups, would the
- 19 general manager or the general manager's senior management staff
- 20 present those findings to the board of directors to keep them
- 21 apprised of the overall state of affairs with respect to safety on
- 22 the WMATA system?
- 23 MR. BENJAMIN: Generally speaking, they will summarize
- 24 reports of that sort and if they believe that there are issues
- 25 that are very significant, they will present those significant

- 1 issues to the board for their consideration.
- 2 MR. KLEJST: Again, just so I understand the nature of
- 3 the board's involvement with the senior management team, it's
- 4 strictly at the policy level unless there's a very unique issue
- 5 that the board feels is not adequately being addressed?
- 6 MR. BENJAMIN: Or that is brought to the attention of
- 7 the board by the staff as an issue that needs board attention.
- 8 MR. KLEJST: If there is a recommendation made, for
- 9 example, by the Safety Board that would be four years old, five
- 10 years old, six years old, and that has not yet been addressed by
- 11 WMATA, is this an area that the board of directors would feel is
- 12 important, given your statement earlier that safety is very, very
- 13 important in the operation of WMATA? Is this an area that the
- 14 board would be involved directly with the general manager or does
- 15 this go beyond that of a policy decision or policy involvement and
- 16 quidance?
- MR. BENJAMIN: Well, our policy is very clearly that it
- 18 is important for Metro to respond to all of the oversight agencies
- 19 and to work closely with those agencies as effectively as
- 20 possible. To the degree that is not happening and it's brought to
- 21 our attention, we clearly will go to the general manager and say,
- 22 why not? And there are several examples of that having happened.
- 23 MR. KLEJST: Could you share an example for us, please,
- 24 that would describe that level of involvement?
- 25 MR. BENJAMIN: Sure. One of the cases was when we

- 1 discovered that apparently staff were not allowing the Tri-State
- 2 Oversight Committee to enter our revenue service under terms that
- 3 everybody could agree to. We stepped in and immediately said they
- 4 must be allowed that access.
- 5 MR. KLEJST: Okay. There are currently 11 items that
- 6 are classified as open that WMATA has with the Tri-State Oversight
- 7 Committee for an incident that took place back in 2004. Is this
- 8 something that the board of directors would be concerned with and
- 9 get involved with in an effort to resolve and to close those items
- 10 out?
- MR. BENJAMIN: If those items were significant and were
- 12 brought to the attention of the board by the general manager, yes,
- 13 or by somebody else if it turned out to be significant.
- 14 Certainly, it sounds on the surface as though something from 2004
- 15 probably should have been closed out, but without doing a detailed
- 16 review, I wouldn't know.
- 17 MR. KLEJST: But this would not be the normal type of
- 18 information that the general manager would brief the board on,
- 19 such as these are the numbers of open corrective action items from
- 20 either previous investigations, previous audits or any other type
- 21 of activities that would generate a recommendation or finding,
- 22 then; is that correct?
- 23 MR. BENJAMIN: Not on a routine basis. We count on the
- 24 general manager and his staff to identify for us issues that
- 25 require our attention and we don't second guess them on that.

- 1 What we do is, we have an inspector general who reports directly
- 2 to the board, and if that inspector general believes that there's
- 3 a problem in areas like that, the inspector general will also
- 4 alert us.
- 5 MR. KLEJST: Now, I know in the inspector general's
- 6 function at WMATA, safety is listed as one of the items in their
- 7 mission statement. Has there ever been an occasion where the
- 8 inspector general, either at the direction of the board or the
- 9 inspector general group, on their own behalf initiated a follow-
- 10 up, some type of activity in connection with a safety-related
- 11 item?
- MR. BENJAMIN: I'm certain that over the years between
- 13 the inspector general and its predecessor, the auditor general,
- 14 that has happened, but I don't think I can give you one of those
- 15 examples right now.
- 16 MR. KLEJST: I understand. And does the board of
- 17 directors have any level of interaction on an either routine or
- 18 non-routine basis with a federal or local oversight agency?
- 19 MR. BENJAMIN: Are you saying do we have a regular
- 20 relationship with the Tri-State Oversight Committee or --
- MR. KLEJST: Well, do you, as the board of directors,
- 22 have any interaction on a routine basis, for example, periodic
- 23 basis, with the Tri-State Oversight Committee or the Federal
- 24 Transit Administration with respect to the operation of Metrorail?
- 25 MR. BENJAMIN: We certainly, once we noted the fact that

- 1 there seemed to be some problems relative to the responsiveness of
- 2 our agency to the TOC, we did invite them to come on a regular
- 3 basis and brief us as to any issues that might be outstanding and
- 4 their ability to deal effectively with the staff.
- 5 MR. KLEJST: And that was an action that was taken after
- 6 June 22 of 2009?
- 7 MR. BENJAMIN: That was an action that was taken when we
- 8 discovered that they were not getting the access to materials and
- 9 the responsiveness that we thought would be appropriate.
- 10 MR. KLEJST: And that was before or after June 22 of
- 11 2009?
- 12 MR. BENJAMIN: After June 22nd.
- 13 MR. KLEJST: After. So to your knowledge then, there
- 14 was no communication, no interaction between the board and either
- 15 the Tri-State Oversight Committee or the Federal Transit
- 16 Administration as far as WMATA's either overall operation or any
- 17 issues with respect to safety concerns on the Metrorail operation?
- 18 MR. BENJAMIN: I would qualify that just to say that
- 19 there was no formal set of reports and no formal set of meetings
- 20 that I remember relative to that. I'm sure over the history of
- 21 Metro, that's been modified some. There probably have been some
- 22 such interactions and all of us, particularly those of us that may
- 23 have worked at one time with the Federal Transit Administration or
- 24 the Department of Transportation, do have contacts with other
- 25 agencies on an informal basis.

- 1 MR. KLEJST: Getting back to one of the questions I
- 2 asked before, as far as the areas that the Customer Service,
- 3 Operations and Safety Committee is involved in, there have been a
- 4 number of incidents over the past 10 years experienced by WMATA.
- 5 There were some derailments, roadway worker fatalities, two
- 6 different incidents with respect to employee fatalities on the
- 7 right-of-way. Is that an area that would normally be an area of
- 8 concern of this committee or would you again be looking at more
- 9 global issues with respect to safety?
- 10 MR. BENJAMIN: Anytime there's a serious injury, a
- 11 serious accident or a fatality, the board is very concerned. The
- 12 board does receive reports on all of those, both through that
- 13 committee and sometimes directly, and depending upon the severity
- 14 of the accident, we may have additional sessions associated with
- 15 it.
- 16 MR. KLEJST: But you would be getting information from
- 17 the senior management team at Metrorail, and if the board feels
- 18 comfortable with the approach taken by Metrorail, then that is the
- 19 extent of the policy oversight that the board provides Metrorail
- 20 in this case?
- MR. BENJAMIN: We get our information from the general
- 22 manager and his staff, wherever that is appropriate, and that may
- 23 not be just the rail people. It may be the safety people. It may
- 24 be the bus people. It may be the engineering people, whoever is
- 25 appropriate and we then attempt to evaluate on a broad basis,

- 1 whether the response that's being given is an appropriate one and
- 2 if it is, we allow the general manager to move ahead with that
- 3 response.
- 4 MR. KLEJST: So if there were recommendations made,
- 5 again I'll use the example of right-of-way fatalities of WMATA
- 6 employees that have been open for a period of time, that would not
- 7 be at the technical level or the operational level that the board
- 8 would be involved with, again, looking at more the strategic
- 9 issues of WMATA's operation, what is the function of the board in
- 10 that particular case?
- MR. BENJAMIN: Again, as I've said before, if that is an
- 12 issue that is sufficiently important that it rises to our
- 13 attention, either through the general manager or somebody else, we
- 14 will, in fact, look at that. On a routine basis, we would not
- 15 review all of those to find out which ones are open and which ones
- 16 are not, and what response has been made.
- 17 MR. KLEJST: Again, you would rely on the WMATA senior
- 18 management team to provide that function?
- 19 MR. BENJAMIN: Correct.
- 20 MR. KLEJST: Thank you. Now, how does the WMATA board
- 21 measure the performance of Metro operations with respect to safety
- 22 and passenger concerns and how do they deal with any
- 23 recommendations made by oversight agencies either at the federal
- 24 level or in this case, the TOC level?
- MR. BENJAMIN: I'm not sure I distinguish the question

- 1 from the previous questions. What are you looking for that's
- 2 different?
- 3 MR. KLEJST: Well, is there any specific reaction,
- 4 either I'll say a formal response issued by the board when it
- 5 deals with I'll say issues that have been brought to the attention
- 6 of the WMATA board by an oversight agency?
- 7 MR. BENJAMIN: Generally speaking, we will not
- 8 generally, and there's always an exception to every rule, we will
- 9 not respond directly to the oversight agency. We will normally
- 10 respond to the general manager and say -- if we believe that the
- 11 general manager is not being sufficiently responsive or not
- 12 dealing with the issue properly, we will deal with him and ask him
- 13 to do so.
- 14 MR. KLEJST: Okay. And what is WMATA board's
- 15 involvement in the management of Metro's operations as far as
- 16 personnel matters, budget, financial distributions of budget, and
- 17 does Metro's management make the decision on where the money is
- 18 spent or is that the decision of the board?
- 19 MR. BENJAMIN: In response to the criticism for many
- 20 years that the board micromanages, one of the things that
- 21 happened, actually, before I was on the board, and when Mr. Catoe
- 22 was hired is, the board made very, very clear that all personnel
- 23 decisions were the decisions of the general manager and that the
- 24 board would hold the general manager responsible for the
- 25 effectiveness of performance because of those personnel decisions.

- 1 So we would not say who should be in which job or how many people
- 2 should be where. We would just say you have to have the result.
- 3 If you have the result, that's good enough for us. If you don't
- 4 have the result, now, it's important for you to get that result
- 5 and you again have the opportunity to change the personnel, to
- 6 change the allocation of those personnel, et cetera.
- 7 In the same way in budgets, we look at the broad issues
- 8 of budgets. For instance, we are currently facing a \$189 million
- 9 potential shortfall in the fiscal '11 budget. We will be focusing
- 10 on what are the ways that we can deal with that budget shortfall.
- 11 We will not get into the details of how much money was allocated
- 12 for this, that or the other contract within that budget or this,
- 13 that or the other office within that budget, again, unless there's
- 14 some obvious reason to believe that enormous mismanagement has
- 15 occurred.
- 16 MR. KLEJST: So again, consistent with the board's
- 17 approach on other issues, the board would be maintaining that of a
- 18 policy advisory function as opposed to providing direct level
- 19 guidance and direction to the general manager, allowing the
- 20 general manager to make those types of decisions with respect to
- 21 the operation, both financial and operational of the WMATA system.
- MR. BENJAMIN: I think I would word that differently.
- 23 We do not provide advice. We establish the policies.
- 24 MR. KLEJST: Okay. And if the general manager were to
- 25 have a need for additional resources, both staffing and financial,

- 1 to provide a greater level of internal oversight with respect to
- 2 safety at WMATA, that would be something that the general manager
- 3 would do on his own or would that be an area that the general
- 4 manager would need to bring forward to the board of directors for
- 5 additional funding or the authorization to hire additional staff
- 6 and possibly get additional funding?
- 7 MR. BENJAMIN: Within the overall limits of the total
- 8 budget, which is constrained by how much money is available, the
- 9 general manager has full authority to make those changes.
- MR. KLEJST: And to your knowledge, has the general
- 11 manager ever presented to the board of directors a request for
- 12 additional resources to improve operational safety at WMATA?
- 13 MR. BENJAMIN: During the time that I've been on the
- 14 board, which is only three years, I don't believe that has
- 15 happened except in the broadest context of letting us know the
- 16 need that we have for our capital program over a multi-year period
- 17 and the fact that that amount of money is just not available from
- 18 federal, state or local sources. That is very well documented.
- 19 MR. KLEJST: And would it be the board's responsibility,
- 20 if such a request were made, again, for additional staffing or
- 21 financial resources, to initiate a greater level of oversight as
- 22 far as the operations as it applies to safety on the WMATA system?
- 23 MR. BENJAMIN: You're asking a question that starts out
- 24 with an if, and I don't see that if has ever really occurred in
- 25 the way that you're describing it.

- 1 MR. KLEJST: If the general manager were to present a
- 2 situation where the general manager felt as if there was a need
- 3 for additional resources to support the safety function, to
- 4 provide additional internal oversight with respect to safety, that
- 5 would be a condition that would need to be presented by the
- 6 general manager to the board and would it be the board's
- 7 responsibility to provide a response to the general manager or
- 8 does that go beyond the functionality of the board of directors as
- 9 you previously described it?
- 10 MR. BENJAMIN: Are you asking if there was a need for
- 11 more money total for Metro beyond the amount that was available
- 12 from federal, state and local sources, would that be a
- 13 responsibility of the board? Is that the question you're asking?
- 14 MR. KLEJST: Yes, if there was a need for additional
- 15 funding and staff to provide additional internal oversight and
- 16 that was not currently within the budget of Metrorail's financial
- 17 resources and their staffing allocations, is that something that
- 18 the board of directors would need to respond to?
- 19 MR. BENJAMIN: Okay. And I have again a problem with
- 20 how you're positing your question. The total budget, operating
- 21 budget is about \$1.5 billion. If you have to increase staff in
- 22 one area or another by a few people, that does not affect a \$1.5
- 23 billion budget. That's something that can be done within that
- 24 total. If what you have to do is replace 250 railcars, that's \$1
- 25 billion. Those are two very, very different questions. If you're

- 1 asking the former one, our direction to the general manager would
- 2 be, within your budget, make sure that safety is fully staffed and
- 3 has the resources it needs. If it is the second, that's one where
- 4 we have to turn to the federal government, the states and the
- 5 localities and say, in order to replace railcars, we need sums of
- 6 money that are larger than we currently have; or we can do it as
- 7 part of our normal budgeting process over time.
- 8 MR. KLEJST: So where does the differentiation take
- 9 place between a significant capital expense, I think was the term
- 10 that you used, with respect to an equipment replacement versus the
- 11 general manager presenting a situation where within my budget
- 12 constraints I am unable to expand the safety oversight function
- 13 within Metrorail, given my current allocation, given my current
- 14 level of resources? I as the general manager believe it would be
- 15 important to provide this level of internal oversight and I need
- 16 additional resources to provide that to ensure the safe operation
- 17 of Metrorail and to be consistent with the organization's mission
- 18 statement, and they present this situation, this condition, this
- 19 request to the board of directors, what would be the next logical
- 20 step as far as the board's interaction with the general manager on
- 21 that specific issue?
- MR. BENJAMIN: Mr. Klejst, again, keep in mind that the
- 23 sum of money that's available to us is the sum of money that's
- 24 available to us. I was for many years the chief financial officer
- 25 of Washington Metro. I cannot imagine a situation where staffing

- 1 and oversight resources would be sufficient for safety that they
- 2 couldn't be found within a \$1.5 billion budget by shifting
- 3 something else around. So your premise is the thing I have a
- 4 problem with.
- 5 MR. KLEJST: So what you're saying is, that would
- 6 continue to be up to the general manager to make adjustments in
- 7 the budget for which the general manager has control of, and that
- 8 would not be an area that the board of directors would be involved
- 9 in?
- MR. BENJAMIN: What I'm saying is that I would be very
- 11 surprised if any general manager would come to the board and say
- 12 what you have said because the general manager has the ability to
- 13 control that, and we would expect the general manager to do that.
- MR. KLEJST: So the board of directors' involvement
- 15 would be strictly that for capital equipment replacing and very
- 16 large capital improvements; is that correct?
- 17 MR. BENJAMIN: No. What I'm saying is if the situation
- 18 that you're asking about is can I have 5 more staff people to do
- 19 oversight or can I have 15 more staff people to do oversight, that
- 20 is certainly something that's well within the budget and something
- 21 that the general manager can do. If it's how are we going to do a
- 22 major investment of some sort, that may be well beyond anything
- 23 that the general manager can do, and that's where the board gets
- 24 involved in broad budgetary issues.
- 25 And one of the things that this general manager has done

- 1 very well is, he has defined the need over the next 10 years in
- 2 great detail, an \$11 billion need, or more than \$1 billion a year.
- 3 The sum total of federal, state and local resources that we can
- 4 imagine being made available are less than \$11 billion. Part of
- 5 what the board is doing is working with federal, state and local
- 6 agencies to try to find that money.
- 7 MR. KLEJST: Thank you. Has the WMATA board of
- 8 directors changed the way it relates to train operations and
- 9 maintenance since the June 22nd accident or is it still business
- 10 the same that it was being conducted prior to the June 22nd
- 11 accident?
- MR. BENJAMIN: I guess this gets into my philosophy
- 13 about the accident and the series of accidents that have occurred
- 14 and the incidents that have occurred. It's abundantly clear to me
- 15 personally, and I suspect many board members are of the same
- 16 opinion, that what we have been doing is not what we can continue
- 17 to do. That, yes, we have to do training; yes, we have to invest
- 18 in technology; yes, we have to look at our procedures, but what we
- 19 need to do is much more substantial. And what that involves is a
- 20 change in the basic culture towards safety within our
- 21 organization. Now, this is my personal view.
- Because of that view, one of the things that we have
- 23 done, and this is an action of the board, is we have reached out
- 24 to the U.S. Department of Transportation, which has a lot of
- 25 resources for looking at safety, not just in transit, but in air

- 1 systems, in rail systems and in automobile systems, and knows how
- 2 safety needs to be dealt with on a cultural basis and on a
- 3 systemic basis, and we said we need to be able to do this in a
- 4 different way, and the U.S. Department of Transportation has
- 5 responded. It has helped us to start to put together a team of
- 6 people who are experts in this broader view of what safety is all
- 7 about in dealing with the culture of safety, not just little
- 8 pieces of safety, and will be able to work with us to identify the
- 9 changes that need to be made, and not just walk away, help us
- 10 implement those changes so that we operate differently.
- 11 Now, U.S. DOT is not enough. Because some of those
- 12 experts are experts in air traffic and in rail, innercity rail,
- 13 we've asked the American Public Transportation Association to also
- 14 join that team, and to have people who are experts in transit, so
- 15 that we can bring that view in.
- And in the end, all of this has to do with people, and
- 17 most of our people who are doing these operations belong to
- 18 unions. And so we've asked the AFL-CIO for their experts in
- 19 safety and dealing with people and dealing with cultures, and they
- 20 have provided information on who can help us.
- 21 That team is currently being put together. That team
- 22 will try and take a completely different look, and that is a board
- 23 initiative.
- 24 MR. KLEJST: In the response you just gave, you
- 25 mentioned that there was a personal view as you described it. Is

- 1 the Customer Service, Operations and Safety Committee tasked with
- 2 those tasks you just described or is there some other group within
- 3 the board that's doing that?
- 4 MR. BENJAMIN: The actions that occur here will be done
- 5 by this committee for the staff and for the general manager, but
- 6 their recommendations will be reviewed by that committee and by
- 7 the board as a whole.
- 8 MR. KLEJST: Thank you.
- 9 Chief Taborn, could you please describe the structure of
- 10 the safety department at WMATA?
- 11 CHIEF TABORN: First of all, thanks very much, Mr.
- 12 Chairman, for affording me the opportunity to come and talk about
- 13 safety. It is through hearings such as this that went back many,
- 14 many years that formed the basis of the state safety oversight in
- 15 the very beginning, and with those efforts of the NTSB, we can
- 16 make sure that we enhance the safety of our patrons as well as our
- 17 employees as we look forward. The NTSB on a daily basis look at
- 18 all modes of transportation to make sure they're as safe as
- 19 possible and this one that's focused on safety is one that we
- 20 encourage and welcome.
- 21 The overview of the safety department, we -- the acting
- 22 chief safety person reports to the general manager and takes
- 23 directions from the general manager, but it is incumbent upon that
- 24 chief safety person to bring to light all of those issues that
- 25 relate to safety in the operations of the Washington Metropolitan

- 1 Area Transit Authority. I would, in answering my question, go
- 2 back to my days at the FTA when I was responsible for the carrying
- 3 out of 659 and the state safety oversight agencies, and I also
- 4 will be speaking from the point of November 23rd, when I came
- 5 about the position of the acting chief safety officer and the
- 6 assessments that I've made from that. But we report information
- 7 to the general manager and we provide that information to the
- 8 board during the Customer Service, Operations and Safety
- 9 Committee, and we report out things that are pertinent to the day-
- 10 to-day operations of safety, those concerns and things of that
- 11 nature. And it's my point to make sure that I bring to light all
- 12 of those safety-related issues that come about.
- 13 MR. KLEJST: Prior to the June 22nd accident, who did
- 14 the chief safety officer position report to?
- 15 CHIEF TABORN: Bear with me for one second. We had the
- 16 chief safety officer reporting to the chief administrative officer
- 17 at one particular point in time, and that was prior to the
- 18 accident, and that person reported directly to the general
- 19 manager.
- 20 MR. KLEJST: Now, over the last five years, how did the
- 21 reporting relationship of the chief safety officer change? You
- 22 mentioned that it's currently a condition where the chief safety
- 23 officer reports to the general manager. Prior to the June 22,
- 24 2009 accident, the chief safety officer reported to the chief
- 25 administrative officer. Were there any other structural changes

- 1 with respect to reporting relationships that took place prior to
- 2 that last one we just described?
- 3 CHIEF TABORN: There were times when the chief safety
- 4 officer reported to the auditor general, if I'm not mistaken, at
- 5 some point in time, several years ago. Let me see, it reported
- 6 also to the assistant general manager for Safety, Security and
- 7 Emergency Management at one particular point in time. But in
- 8 November of this year, it reports directly to the general manager.
- 9 MR. KLEJST: Now, is the chief safety officer a separate
- 10 position from the assistant general manager of, I think you said,
- 11 safety, security?
- 12 CHIEF TABORN: Yes, it was.
- 13 MR. KLEJST: And that assistant general manager of
- 14 safety and security had both the traditional safety function as
- 15 well as that of security?
- 16 CHIEF TABORN: Yes, that person was over charge of the
- 17 police department, the chief of police, as well as the chief
- 18 safety officer.
- 19 MR. KLEJST: Prior to the June 22nd accident, was the
- 20 chief safety officer in a reporting relationship to the general
- 21 manager directly?
- 22 CHIEF TABORN: Not at that time, no, sir.
- 23 MR. KLEJST: Within the past five years?
- 24 CHIEF TABORN: There was a point in time, and I'd have
- 25 to go back through my notes, that there was an occasion that the

- 1 chief safety officer reported to the general manager. I think
- 2 that was approximately five or six years ago when Dick White was
- 3 the general manager.
- 4 MR. KLEJST: Okay.
- 5 CHIEF TABORN: But it's changed over the years.
- 6 MR. KLEJST: Thank you.
- 7 Mr. Catoe, could you explain why there was this change
- 8 in the reporting relationship with the chief safety officer and
- 9 the general manager given the importance of safety to a
- 10 transportation operation?
- 11 MR. CATOE: Well, let me go back in time when I first
- 12 arrived at the agency in 2007. As the chief indicated, safety
- 13 reported to, at some point, to the chief financial officer, the
- 14 chief of audit. After that period of time, I did create a section
- 15 of security and safety, which the chief of police took over that
- 16 position and that position reported directly to me. When that
- 17 person left the agency, we converted the position to the chief
- 18 administrative officer and safety reported to the chief
- 19 administrative officer with a dotted line reporting directly to
- 20 me. After the June 22nd accident, safety was given a direct
- 21 report on a daily basis to me.
- 22 MR. KLEJST: Now, given the mission statement published
- 23 in the System Safety Program Plan as far as the importance of
- 24 safety to the WMATA organization, how does that reflect on WMATA's
- 25 commitment to safety by removing a chief safety officer with a

1 direct reporting relationship to a chief administrative officer's

- 2 reporting relationship?
- 3 MR. CATOE: Well, there was not a direct reporting
- 4 relationship until after June 22nd. But ultimately, every WMATA
- 5 employee is responsible for safety and, ultimately, I have the
- 6 responsibility for safety of the agency. There were many times
- 7 during this period of time, and as the chief safety officer
- 8 realized, if there was an issue that did not have to report
- 9 through any other employee, they reported directly to me on the
- 10 events.
- MR. KLEJST: Well, you did mention, I think it was the
- 12 assistant general manager of safety and security reported directly
- 13 to you and then when that person left, the position itself then
- 14 reported to the administrative officer's position?
- 15 MR. CATOE: Yeah. That position included safety and law
- 16 enforcement. At the time, we split law enforcement and safety and
- 17 the safety reported to the chief administrative officer.
- 18 MR. KLEJST: And besides the safety function that chief
- 19 administrative officer was responsible for, what other functions
- 20 did the chief administrative officer have within their major
- 21 function of responsibilities?
- MR. CATOE: The responsibility for human resources, all
- 23 of the personnel functions of the agency, the technical
- 24 responsibility for our computer and IT systems for the
- 25 organization, as well as long-range planning.

- 1 MR. KLEJST: So that I understand correctly, the
- 2 position of chief safety officer did report directly, then changed
- 3 to an intermediary position reporting to an assistant general
- 4 manager of safety and security, and then changed again to a
- 5 department that was responsible also for human resources, IT
- 6 support and long-range planning?
- 7 MR. CATOE: The first one you mentioned that is
- 8 reporting directly, it initially reported through the chief of
- 9 security and safety, then the quality assurance -- I'm sorry, the
- 10 chief administrative officer, as well as recently a direct report.
- 11 There was a restructure in some components, if I may.
- 12 This wasn't done in a vacuum. After 2007, and looking at the
- 13 components of safety, there was a segment of quality assurance
- 14 that dealt with the day-to-day hands-on safety of the operating
- 15 divisions and the operations of our rail system. Those quality
- 16 assurance functions were transferred directly to the head of rail
- 17 operations and the head of bus operations to report on a daily
- 18 basis what aspect of -- what's our safety compliance, as well as
- 19 the functionality of our equipment in the operations.
- 20 MR. KLEJST: So the assistant general manager, I believe
- 21 you used the title of safety, security and QA/QC, was the person
- 22 that the chief safety officer reported to at one time, and then
- 23 that position reported directly to you?
- MR. CATOE: Yes.
- MR. KLEJST: Okay. Now, safety and security and QA/QC,

- 1 had some common elements amongst them. Was there a rationale for
- 2 moving the chief safety officer position to the chief
- 3 administrative officer where the other associated functions were
- 4 human resources, IT and long-range planning?
- 5 MR. CATOE: The rationale, from a structural standpoint,
- 6 there wasn't -- there was still -- the function of safety -- if
- 7 you recall, when I split up the organization at that time, quality
- 8 assurance went directly to the head of operations, and safety
- 9 remained separate from that, reporting to the chief administrative
- 10 officer. In looking at the breadth of responsibility, it was my
- 11 determination that that person could effectively manage and report
- 12 on the safety functions and issues that the organization have.
- 13 MR. KLEJST: I'm going to ask WMATA to provide the
- 14 Hearing Officer with organizational charts that track the
- 15 progression that you just described for purposes of our record
- 16 here today.
- 17 Chief Taborn, does WMATA have a process for collecting
- 18 safety concerns directly from employees?
- 19 CHIEF TABORN: Absolutely. There are a variety of -- we
- 20 have safety hotline, which is 202-962-1057. There's an auditor --
- 21 OIG, which is 962-2400. There's also meetings that -- the local
- 22 safety committee meetings, departmental safety committee meetings,
- 23 that employees can bring to light those concerns. They can call
- 24 directly or e-mail directly to the general manager or to me, the
- 25 chief safety officer, and anonymously or with their name associate

- 1 some safety concerns. We get those guite frequently and all the
- 2 time.
- 3 MR. KLEJST: And how would those issues be tracked
- 4 within the organization? If an employee were to call directly to
- 5 the safety hotline or if an issue was raised at a safety committee
- 6 that was other than, for example, a facility issue, if there was
- 7 what was believed to be a systemwide safety concern, how would
- 8 that be processed throughout the Metrorail organization from the
- 9 time that it gets presented to Metrorail through it's ultimate
- 10 resolution?
- 11 CHIEF TABORN: Part of the System Safety Program Plan,
- 12 of which we've had since 1983, in fact, many years before the
- 13 Federal Transit Administration came out with 659 that mandated
- 14 that you have some form of System Safety Program Plan, within
- 15 those 21 standards or elements, there is what is called a
- 16 hazardous identification resolution matrix. And that information
- 17 that comes from those sources, such as an employee talking about a
- 18 safety concern, is populated into that hazardous identification
- 19 matrix, and it's tracked by the people in our safety department,
- 20 as well as things that may come to us by way of maintenance or
- 21 things of that nature.
- 22 MR. KLEJST: So the items that are presented, regardless
- 23 of whether it's the safety hotline input or the safety committee
- 24 input, that then goes to the safety department where it's
- 25 identified as a unique issue. And again, if you could walk me

- 1 through how the safety department takes that information and again
- 2 brings it ultimately through closure? I understand you mentioned
- 3 about the hazard resolution process, but from an internal
- 4 standpoint, how does an issue, say, within the TSSM, the track
- 5 maintenance operations or in the Metrorail operations, how does
- 6 that ultimately get resolved?
- 7 CHIEF TABORN: You have various databases that we
- 8 receive from various departments throughout the agencies, various
- 9 reports that come to us by QA/QC, information that comes by way of
- 10 the hotline, and it's incumbent upon us, which it is a chore, to
- 11 capture all of that information and to track it and to reach back
- 12 out to those respective departments to seek resolution. And those
- 13 are tracked and those also, in accordance with the SSPP and our
- 14 relationship with the Tri-State Oversight Committee, are reported
- 15 to them.
- 16 MR. KLEJST: So the individual operating departments
- 17 that are affected by that particular issue, they would be assigned
- 18 the responsibility of developing the issue, coming up with
- 19 appropriate corrective action, and they in turn would report back
- 20 to you?
- 21 CHIEF TABORN: It's a combination. They will identify
- 22 the issue. They will report that issue. If, in fact, it's a
- 23 safety violation or a recommendation, that is documented. We make
- 24 sure in the safety department that what actions are taken, you
- 25 know, are completed. And that is our way of ensuring we are

- 1 working with operations to create a more efficient and effective
- 2 database to capture that in one place so that we would not have
- 3 multiple places that we would have to go to seek that information.
- 4 But that's the process. When things are identified as being a
- 5 concern, whether it's an open door or whatever, we track that.
- 6 And again, that is information that is captured and provided to
- 7 the Tri-State Oversight Committee in accordance with the 659 state
- 8 safety oversight regulations.
- 9 MR. KLEJST: You mentioned about the system that you
- 10 have in place, and I believe you said you were in the process of
- 11 enhancing that system. Going back to the condition that existed
- 12 on June 22 of 2009, if an employee or groups of operators were to
- 13 have reported situations where there were train overshoot
- 14 conditions, is there someone designated within Metrorail, whether
- 15 it be the safety department or another department, that would
- 16 collectively look at this information to determine that it's not
- 17 just an ad hoc, one-time occurrence at a particular station, that
- 18 there were several of them and that perhaps this might be a
- 19 systemic problem and perhaps may need to be dealt with
- 20 differently? Is there a mechanism to look at a particular issue
- 21 from that standpoint or are they all looked upon as individual
- 22 occurrences with no connectivity between them?
- 23 CHIEF TABORN: There are a variety of systems. There's
- 24 maintenance operations control center reports. There's rail
- 25 operations control center reports, bus OCC. And those are

- 1 electronic reports that alert a variety of people, including those
- 2 in the safety department, that something is happening. We then
- 3 will track those. We will reach out to that respective department
- 4 and sort of be the eyes and the ears, but they, too, are tracking
- 5 those. And the whole goal is to have a system safety approach
- 6 that we collectively will be monitoring those types of activities
- 7 to come to some resolution to prevent that from happening again.
- 8 And that, too, are some of those types of information that we
- 9 share with our Tri-State Oversight Committee. And they come in
- 10 and when they conduct an audit to see if in fact we're living up
- 11 to the System Safety Program Plan as relates to that.
- 12 MR. KLEJST: So the internal reports that are generated,
- 13 they would go to the, I'll say the heads of the operating
- 14 departments, such as the rail operations unit or the TSSM unit,
- 15 that they would know that not just one overshoot condition
- 16 occurred, that we had within the calendar quarter or a calendar
- 17 year, 18 of them or 2 of them or some number that would be
- 18 aggregated and put together and reported that way, or are they
- 19 just getting individual reports with no, say, analysis attached to
- 20 that?
- 21 CHIEF TABORN: Now, with respect to the construct of the
- 22 operations, how they go about assessing that, I would have to
- 23 defer to somebody from operations. I'm just talking about the
- 24 basic information and what we in the safety department use. We
- 25 will reach out to that representative from that particular

- 1 department and make an inquiry, but who actually sees it in that
- 2 respective department and takes actions with it, I don't know who
- 3 that person is to be honest. I don't know who that person is.
- 4 MR. KLEJST: Okay. Mr. Catoe, what is the decision-
- 5 making process in place for allocating resources for the safety
- 6 function at Metrorail?
- 7 MR. CATOE: Well, there are two processes in place.
- 8 There's the budgetary process that we do on an annual basis and
- 9 there's also the allocation midyear. For an example, if a
- 10 situation arises and Mr. Kubicek gives me a call concerning issues
- 11 of emergency maintenance that needs to be done that he feels is
- 12 important for the safety of the system, he's authorized to go
- 13 ahead and spend the monies even though those dollars might not be
- 14 set aside in the budget. My communications with him and others
- 15 within the organization is, if there's a safety issue, spend the
- 16 dollars and we'll figure out how to pay for it later.
- 17 So there is a process, a formal process, the budgetary
- 18 process that occurs on an annual basis, and then there is the day-
- 19 to-day operational issues where we might have to shift monies, if
- 20 necessary, for safety. But it can be done without Dave calling
- 21 and asking my permission, or any -- or bus operations. They take
- 22 the action and then we discuss what monies we move around to pay
- 23 for it.
- 24 MR. KLEJST: As a follow-up to that, if there was a need
- 25 that was presented to you of, I'll say a significant increase in

- 1 resources, financial and staffing, to perform additional safety
- 2 functions that might be beyond the ability for that particular
- 3 individual to reallocate, could you describe that process and how
- 4 that, you know, interaction might be to try to resolve that
- 5 conflict?
- 6 MR. CATOE: I think there's been two specific cases I
- 7 can think of when you talk about requests for resources. One was
- 8 how do we make the split between safety and quality assurance, and
- 9 quality assurance, as I communicated, before was part of the
- 10 overall safety function as well as risk management. When that
- 11 responsibility shifted to the operations group, it was
- 12 communicated clearly to me that we did not have sufficient
- 13 resources in the judgment of the heads of operations of both bus
- 14 and rail. As a result, my discussion with them was to go ahead
- 15 and increase those numbers but find other resources within your
- 16 budget to increase that staffing level.
- The other issue that arise was more recently in the past
- 18 year in developing the current year's budget, which occurred --
- 19 was effective last July 1st, is an increase in the actual number
- 20 of staffing in the safety department itself. That comes through a
- 21 budgetary process. If there is a request for specific equipment
- 22 or other equipment or support from the standpoint of outside
- 23 resources of bringing people in, then generally the deputy general
- 24 manager of operations independently goes ahead and makes that
- 25 decision and takes that action.

- 1 MR. KLEJST: So you're really looking at the limitation
- 2 of reallocating existing resources at the expense of some other
- 3 function or operation within WMATA in order to, for example,
- 4 increase the internal oversight that might be in existence at that
- 5 given time in order to provide those additional resources?
- 6 MR. CATOE: No, that's part of what we do. In addition,
- 7 from the budgetary standpoint, there's additional dollars that
- 8 have been added to the budget itself specifically -- and, again,
- 9 from the year and the amounts, I would have to get more detail --
- 10 for additional training of personnel for safety and whatever
- 11 equipment and again supplies and support from a more comprehensive
- 12 safety program, if it's needed, then we include that as part of
- 13 the budget.
- 14 There's a budgeting process that occurs once a year.
- 15 There's the transfers of funds as necessary and there's a
- 16 reallocation of resources as necessary.
- 17 MR. KLEJST: Ultimately, you're looking at a cap for
- 18 your total operating budget, as was described during questions
- 19 with the board of directors, a series of questions. There's an
- 20 ultimate cap that you have and you are limited to reallocating
- 21 those resources within the total operating budget that WMATA has
- 22 then; is that correct?
- 23 MR. CATOE: There's an ultimate cap, yes.
- 24 MR. KLEJST: Okay. Chief Taborn, is the safety
- 25 department the only group within WMATA Metrorail that is

- 1 responsible for providing safety oversight?
- 2 CHIEF TABORN: No. Once again, with our System Safety
- 3 Program Plan is quite clear that every employee, the 10,000 plus
- 4 employees, in their respective roles, in their respective
- 5 departments, to include supervisors, are, you know, required to
- 6 make sure that they operate safely in accordance to the respective
- 7 rules, you know, appropriate to their work site. So we don't tend
- 8 to look at safety as being a group of 30 or 40 people. We look at
- 9 safety as being a group of 10,000 plus, and that's been the
- 10 approach since the opening of the system. It's always been the
- 11 approach, and we're just working diligently to make sure that
- 12 everybody understands that it is incumbent upon each of us to make
- 13 sure that lives are being safe because of our actions and what we
- 14 do and reporting unsafe situations.
- MR. KLEJST: Understanding that safety is everyone's
- 16 responsibility, are there any other groups within the Metrorail
- 17 organization that have a formal responsibility to conduct
- 18 observations, audits, inspections and to verify that employees are
- 19 performing their jobs in compliance with existing rules,
- 20 procedures, any regulations that may be in effect, general orders,
- 21 special orders, along -- requirements along those lines?
- 22 CHIEF TABORN: Yes. Yes, there is, and I think the
- 23 general manager mentioned quality assurance, quality control.
- 24 Those individuals are tasked with making sure that the rules and
- 25 regulations and the processes that are in place are carried out

- 1 appropriately. We also have the Office of Inspector General that
- 2 also has a role in ensuring that the safety of the workplace is
- 3 carried out. We also have the respective supervisors whose job
- 4 includes making sure that the operations within their confines are
- 5 safe as possibly can be. So, again, those are the groups of
- 6 people in addition to the representatives from the Office of
- 7 Safety that have that responsibility.
- 8 MR. KLEJST: You mentioned the responsibilities of
- 9 supervisors to perform the observations that you just described.
- 10 Is that a formal or informal program? And if I could just clarify
- 11 that a bit. Is there a requirement for the supervisors to
- 12 complete reports that are maintained within a database so that the
- 13 WMATA management team would have access to that or are these just
- 14 individual observations that are not processed in any formal way?
- 15 CHIEF TABORN: I think it's part of their respective job
- 16 descriptions but it also is part of a database that captures this
- 17 type of information that is operationally focused, and that
- 18 database is reviewed by the respective leaders in those
- 19 departments and shared with, again, the safety department.
- 20 MR. KLEJST: Mr. Kubicek, as a follow-up to that
- 21 question, with the responsibilities that you have within
- 22 Metrorail, is this information that your department would
- 23 routinely collect and analyze and examine to determine if there
- 24 are any safety-related concerns, trends in the wrong direction,
- 25 with respect to safety?

- 1 MR. KUBICEK: Yes, that is correct.
- 2 MR. KLEJST: And could you describe the mechanism by
- 3 which that takes place?
- 4 MR. KUBICEK: Well, what we have is we started a
- 5 database probably about a year and a half, two years ago. We use
- 6 a Blackberry module because everybody, you know, has e-media
- 7 access. It was a lot more efficient than using a paper product.
- 8 Pretty much what we did, we established criteria about
- 9 announcements, about rule of compliance as far as uniforms, where
- 10 they were stopping at, overall terms and conditions. That
- 11 information is assembled. It's reported by the supervisors. The
- 12 supervisors also have to -- are held accountable to do X amount of
- 13 performance checks, you know, on a regular basis. Then that
- 14 information is assembled into a centralized database. Everything
- 15 is sent in real time. And then from there, it starts us and gives
- 16 us the ability to start trending if we see things that are going
- 17 incorrectly with, you know, operators, you know, if they're having
- 18 particular issues or if we're seeing equipment issues from their
- 19 observation standpoint.
- 20 MR. KLEJST: And that was a process in place prior to
- 21 June 22 of 2009?
- 22 MR. KUBICEK: Yes, it was in development. We got very
- 23 aggressive on it prior to -- about two years ago, whenever I first
- 24 got here. It was more of a paper, you know, process, but this
- 25 automation was there, and it continues to be developed and

- 1 enhanced.
- 2 MR. KLEJST: So it's still work in progress or is this
- 3 an up and running system?
- 4 MR. KUBICEK: It is up and running system. It was
- 5 active, you know, at the time, but as any system that you start,
- 6 my biggest concern is about complacency. You start it at ground
- 7 level and then you continue to advance, you know, based on the
- 8 information that you get. Do you have to adjust your views or
- 9 your focal points? And, you know, as you collect this data, it's
- 10 not that you can get a good snapshot and say, for instance, a week
- 11 time frame; sometimes it takes you, you know, six months;
- 12 sometimes it takes you a year to really get a good snapshot of
- 13 information, you know, short term and long term.
- MR. KLEJST: Would it be fair to characterize your
- 15 response to say that the need was recognized going back two to
- 16 three years ago; however, the system was recently put into place
- 17 so that it is a real time usable database to record these types of
- 18 observations?
- 19 MR. KUBICEK: Yes. There was a need, you know, that was
- 20 identified. We have to become more efficient, take advantage of
- 21 technology that's out there. As we all know, it takes time to put
- 22 these systems, you know, together. There's a lot of reporting
- 23 requirements by the agency and this was one of those mechanisms
- 24 that we found was more efficient and, as I've stated previously,
- 25 it's a good system. It's a good product. We've shown it to

- 1 others. We've been inquired by other transit authorities about us
- 2 talking to them on how it's working. But it's also -- we see it's
- 3 options endless, you know, as we continue to move forward.
- 4 MR. KLEJST: Okay. But if we were to go back to the
- 5 2004, say, 2006 time frame, was a system that you just described
- 6 in effect at that time?
- 7 MR. KUBICEK: 2004, 2006, I would not say to the scale
- 8 that you see right now. There was definitely some reporting and
- 9 audit, you know, findings but not to the sophistication that you
- 10 see now.
- 11 MR. KLEJST: Okay. So was there a capability during
- 12 that time frame to collect data throughout the entire Metrorail
- 13 system, analyze it and determine systemic trends?
- 14 MR. KUBICEK: That was prior to my tenure here. But I
- 15 would make the assumption that, you know, that the staff was
- 16 collecting information, the rail operations group was, you know,
- 17 putting together respective reports. As far as the exact process,
- 18 you know, again, it was more, you know, paper based, and then
- 19 there was some experimentation, you know, with electronic media.
- 20 I can just comment more so on what -- my arrival and what I've
- 21 really started to focus on.
- MR. KLEJST: Thank you.
- 23 Chief Taborn, you mentioned that the inspector general
- 24 office was one of the groups that provided this audit inspection
- 25 and oversight function. Would the qualifications of this group be

- 1 such that they would be able to make observations to determine if
- 2 an employee was performing their job with technical accuracy?
- 3 CHIEF TABORN: I'm not quite sure, in response to your
- 4 question, if in fact they brought that qualification in. A lot of
- 5 it would be basically interviewing employees that reported some
- 6 concerns relative to safety. But to actually see if in fact a
- 7 particular job was being carried out appropriately, that I don't
- 8 know.
- 9 MR. KLEJST: So it's more likely that the inspector
- 10 general would follow-up in an interview fashion if there was a
- 11 condition reported and to provide those findings to the
- 12 appropriate person, as opposed to someone in the safety or
- 13 operating or QA/QC department that might have technical expertise
- 14 on an inspection procedure of a vehicle or the application of
- 15 right-of-way protection that would be able to make an observation
- 16 that's technical in nature?
- 17 CHIEF TABORN: And they would also work with, in all
- 18 probability, the safety department, and I have received inquiries
- 19 from the OIG to look at safety-related violations. So they do it
- 20 in concert.
- MR. KLEJST: Mr. Kubicek, you mentioned that there were
- 22 observations made by supervisory personnel that have technical
- 23 expertise. They would be looking at actual employee performance
- 24 in both the maintenance and operating units within Metrorail?
- MR. KUBICEK: Yes. The primary focus would naturally be

- 1 on the transportation component with our frontline supervision.
- 2 And then what we have is, with the quality control or quality
- 3 assurance folks, what they do is they look at the summarization of
- 4 information that's collected, and then they would go into specific
- 5 areas and follow up on that as well.
- 6 MR. KLEJST: And they would have the technical expertise
- 7 to understand that an employee was performing a particular job
- 8 correctly in accordance with WMATA standards?
- 9 MR. KUBICEK: That is correct. We use the frontline
- 10 supervision to get a global snapshot review and then the quality
- 11 control/quality assurance folks possess a little bit more, you
- 12 know, technical background to assess the situation be it
- 13 maintenance or operational.
- 14 MR. KLEJST: And again, prior to the development of the
- 15 system that you described that was fairly recent, this information
- 16 was not reviewed as detailed as it is now for trends or for
- 17 identification of systemic issues?
- MR. KUBICEK: I don't think that would be a fair
- 19 assessment to state. The staff definitely, you know, looked at
- 20 information, looked at trending. You know, there were reports
- 21 that existed prior to me coming here. It's just that my emphasis
- 22 definitely helped accelerate some of these technologies and
- 23 approaches.
- MR. KLEJST: Yeah.
- 25 Chief Taborn, how does the safety department interact

- 1 with other operating departments at Metrorail such as the Rail
- 2 Operations Delivery and the Transit Infrastructure and Engineering
- 3 Services unit, as far as addressing specific safety issues? You
- 4 touched upon it earlier, but if you could go into a little more
- 5 detail as to how does an issue, a safety concern in, for example,
- 6 the transportation delivery, Rail Operations Delivery services get
- 7 resolved with the unit itself within Metrorail?
- 8 CHIEF TABORN: Okay. There are a variety of ways. We
- 9 have safety representatives working at the various divisions,
- 10 whether they be bus or rail. They participate in the local safety
- 11 committee. So those activities and those revelations of safety
- 12 concerns are brought up at that level, and they offer assistance
- 13 and they track that information. Then at the next level,
- 14 departmental safety committee meetings, they, too, are elevated to
- 15 a much higher level and that is one of greater importance. And
- 16 then finally there's the standing safety executive committee
- 17 meeting that now, thanks to the participation of the Tri-State
- 18 Oversight Committee and our union representatives, that we are now
- 19 -- as well as all the executive leaders, looking at safety
- 20 concerns that are at a level that actions can be taken that at the
- 21 lower level could not have been resolved, whether that includes
- 22 and involves finances, monies, resources. But it is at that level
- 23 that once we talk about those situations, I then can present to
- 24 the general manager the results of that activity that was taking
- 25 place at that standing safety executive committee meeting.

- 1 MR. KLEJST: Now, the committee you just described, how
- 2 long has that been in place?
- 3 CHIEF TABORN: Well, I know it's contained in our System
- 4 Safety Program Plan, and I know at least two to three years,
- 5 something like that.
- 6 MR. KLEJST: Now, if there were a situation that were to
- 7 develop where the safety department or, say, as the chief safety
- 8 officer and the person ultimately responsible for rail operations
- 9 did not agree in an outcome or recommended outcome, how is that
- 10 conflict resolved in WMATA?
- 11 CHIEF TABORN: Well, it's resolved this way. If in fact
- 12 it's a safety concern and the chief safety officer stands firmly
- 13 behind what it is that will enhance the safety, I will pass that
- 14 information on to the general manager. And I will pass that along
- 15 to him with my recommendations that the disconnect or the
- 16 confrontations between operations and safety cannot exist, and we
- 17 should always err on the side of safety. And ultimately the
- 18 general manager would have to resolve that particular issue, but
- 19 it would be based upon recommendations.
- 20 MR. KLEJST: And prior to moving the resolution process
- 21 to the general manager's level, the level that would generally
- 22 deal with a conflict like that would be the Safety Executive
- 23 Committee?
- 24 CHIEF TABORN: Well, my position is going directly to
- 25 the operations person because that is whom I would have to work

- 1 out the particulars, and I think we have a very good working
- 2 relationship. And again, we're all in the business to make sure
- 3 that whatever delivery of transportation is a safe delivery, and
- 4 that is working with the Oversight Committee, the FTA, NTSB.
- 5 We're all after the same results, and that's to make sure that we
- 6 deliver good quality, safe transportation. And so I would have
- 7 that discussion with him or her and we would come away with the
- 8 resolution that could roll the trains or roll the buses, but do it
- 9 in a safe manner.
- 10 MR. KLEJST: Okay. And, Mr. Kubicek, with the
- 11 understanding that safety is everyone's responsibility, as we've
- 12 heard some of the witnesses testify to earlier this morning, could
- 13 you describe for me please specific actions that you in your
- 14 department take as far as the implementation of WMATA's System
- 15 Safety Program Plan?
- 16 MR. KUBICEK: Could you be a little bit more specific
- 17 with what you're asking me?
- MR. KLEJST: Well, are you familiar with the System
- 19 Safety Program Plan --
- MR. KUBICEK: Yes.
- 21 MR. KLEJST: -- and the elements? What role do you play
- 22 in implementing that program within the WMATA system?
- 23 MR. KUBICEK: My role is working again with the safety
- 24 department. You know, we are operationally focused to, you know,
- 25 provide buses and railcars to move the public, but along the way

- 1 you have various criteria that you review as far as your risk
- 2 analysis. Say, for instance, during the course of the day you
- 3 might identify a possible defect. Whenever that defect is
- 4 identified, you know, you need to communicate that. You need to
- 5 get the right resources around you to make sure that you're
- 6 addressing the issue.
- 7 I think it's also very important that you look at this
- 8 from a perspective of a short-term and long-term overview. That's
- 9 where you work with the safety department, because sometimes you
- 10 can make repairs or fixes on a very knee jerk platform, but you
- 11 don't possibly really assess the overall view.
- 12 Part of my responsibility as well is -- with my multiple
- 13 departments, you know, there is a focus in transportation, there's
- 14 a focus in our track and structures group, there's a focus in car
- 15 maintenance and in our storeroom and material logistics, and my
- 16 job is working with my staff along with Safety in each one of
- 17 their respective areas to implement the program to the best of our
- 18 ability.
- 19 MR. KLEJST: As far as accountability for implementation
- 20 of the System Safety Program Plan, does that lie within your
- 21 department or is that a function of the safety department?
- 22 MR. KUBICEK: It lies with everyone, but I would say the
- 23 accountability rests on my shoulders just as much, if not more so,
- 24 than the safety department. Our job is, again, operationally,
- 25 engineering to figure out what has taken place and to try to

- 1 implement and recommend systems and fixes that we can move
- 2 forward, in conjunction with working with our safety department
- 3 and utilizing their resources as well.
- 4 MR. KLEJST: You mentioned about uncovering issues and
- 5 performing risk assessments. Is that something that you in your
- 6 department do with your own internal staff or is that something
- 7 that you do in conjunction with the safety department?
- 8 MR. KUBICEK: We do it internally as well as externally.
- 9 You know, we generate a lot of information. You know, we have
- 10 several thousand employees in our respective areas. So there's a
- 11 lot of departments. I don't know if Safety could effectively, you
- 12 know, address every little biddy thing. What we look at is use
- 13 them and their subject matter experts to really help us tighten up
- 14 the global view of what's taking place out there. But it's a
- 15 combined effort, especially if we view that it's a large issue,
- 16 naturally, Safety is brought into it early on as soon as we might
- 17 know something, if there's a major concern by the staff as well.
- 18 MR. KLEJST: If your department uncovers a particular
- 19 safety performance issue, and I'll use an example for this
- 20 particular question, excessive rail wear at a particular location
- 21 within the system that if left unattended to may lead to a train
- 22 accident, what do you do with that information?
- 23 MR. KUBICEK: With that information right there, if it's
- 24 brought up in that fashion, it would be more along the lines of a
- 25 more direct communication, you know, with the safety department.

- 1 You know, first of all, you'd get your track and structures group
- 2 in there, what they've seen. You'd start pulling maintenance
- 3 records to see, you know, what has possibly developed to this
- 4 stage. You get your engineering effort out there as well so they
- 5 can analyze to say what's taking place, as well as you would work
- 6 with the safety department to bring it to their immediate
- 7 notification. And then the main thing is to start formulating
- 8 some type of mitigation and/or repair to resolve the issue.
- 9 MR. KLEJST: And that interaction with the safety
- 10 department, how is that notification made and what involvement did
- 11 they have in the ultimate resolution of a situation as we were
- 12 just talking about?
- MR. KUBICEK: Well, depending upon the situation, in our
- 14 control center, for example, we have a notification where we send
- 15 out alphanumeric pages, as well as we do a lot of phone calls.
- 16 Also we're housed in the same building. It's not uncommon for
- 17 somebody to walk to see somebody in the hallway to talk with them
- 18 as well. So there's various layers of communication that are
- 19 provided for us all. But again, we do provide -- like I said, the
- 20 frontline would be some type of e-notification as well, depending
- 21 upon the timing.
- 22 MR. KLEJST: And we touched upon this issue that I'm
- 23 about to ask you a question on in earlier testimony. What if
- 24 there were a conflict between the track issue that we were just
- 25 talking about as far as the operating department feeling that the

- 1 condition can exist as is versus the safety department's overall
- 2 concern for the possibility of an accident occurring at a location
- 3 like that? How is that conflict resolved at that particular point
- 4 where the general manager may not be available if it happens to be
- 5 off hours, on the weekend? What's the mechanism that something
- 6 like that takes place?
- 7 MR. KUBICEK: Again, it would lie with us, you know,
- 8 working together collectively. If we cannot reach an absolute
- 9 consensus on what we would do, talking about track work which is
- 10 extremely critical, you know, we do have options. We can single
- 11 track it, depending on what's taking place. You provide these
- 12 notifications. The other thing is that based on this, if we could
- 13 not find resolution and we did not have the ability, you know, to
- 14 escalate it, there would be other notifications, you know, sent
- 15 out to Safety to say, okay, we're at an impasse; are we going to
- 16 be put in a position to stop service or can we operate, like, with
- 17 a varied speed restriction as we continue to work parallel, you
- 18 know, as far as our notification? And we would notify the general
- 19 manager and other parties as soon as possible.
- 20 MR. KLEJST: Now can Safety overrule a decision that's
- 21 made by someone in your department if they feel the conditions
- 22 that are present at that particular point in time prevent for safe
- 23 operation?
- MR. KUBICEK: Yes.
- MR. KLEJST: Okay.

1 Chief Taborn, with respect to configuration management,

- 2 how is that incorporated into WMATA's operation? Who has that
- 3 overall responsibility for configuration management?
- 4 CHIEF TABORN: Well, again that's working with our
- 5 operations, our various engineers through Dave's shop, to make
- 6 sure that -- we don't necessarily have the subject matter
- 7 expertise in Safety, but we're working to get additional
- 8 engineers, but we depend on some of the people that Dave has
- 9 brought in to make sure that when we put a system in place, that
- 10 it speaks and says exactly what it is that we need it to say. So
- 11 we don't independently, because we are Safety, intrude into an
- 12 area if we don't have that subject matter expertise.
- And as we recruit qualified people, that is what we're
- 14 doing, as well as transit agencies all over the country are doing
- 15 the same thing, to make sure that they get good qualified people
- 16 in various positions to make sure that the safe operations of
- 17 their system is number one.
- 18 MR. KLEJST: Now, as far as document control is
- 19 concerned, who within WMATA, what department or group, has the
- 20 responsibility to ensure that standard operating procedures,
- 21 standard maintenance procedures, general orders, special orders,
- 22 safety rules, are reviewed periodically and are revised as
- 23 conditions warrant?
- 24 CHIEF TABORN: That's a combination of various people
- 25 who make up the Safety Handbook Rule Committee. It includes

- 1 members from safety, from operations, and we work on a continuous
- 2 basis and, thanks to many of the observations by our Tri-State
- 3 Oversight Committee, we do make rule changes and they hold us
- 4 accountable to make sure that whatever rule we put in place will
- 5 ensure that the safety of our patrons and our employees are number
- 6 one. So we do have an ongoing Safety Rules Handbook change
- 7 operations.
- 8 MR. KLEJST: How about we move that question to standard
- 9 operating procedures, standard maintenance procedures or, for
- 10 example, a special order that might be applied to a particular
- 11 area at WMATA. What group would be responsible to ensure that a
- 12 particular order is in fact still accurate and if there is a need
- 13 for any revisions, and if there is a revision, what group is
- 14 responsible for disseminating that information to all the parties
- 15 affected by that change?
- 16 CHIEF TABORN: Okay. Again, I can speak, recently,
- 17 under the leadership of the general manager, we have brought
- 18 together those people who have the knowledge, the experience. We
- 19 include the Tri-State Oversight Committee, the unions, FTA and
- 20 everybody in our effort to make sure that when we propose a rule,
- 21 we invite representatives from other transit agencies because we
- 22 want to do it right. We welcome and we've recently had
- 23 participation from the Federal Railroad Administration in looking
- 24 at various rules that speak to road worker safety. So we are
- 25 receptive of all of the information that can ensure that the

- 1 safety of our people are right and we have the right rules in
- 2 place that, as they've indicated, is not just a knee-jerk reaction
- 3 to something, but something that's well thought out and has some
- 4 validity.
- 5 MR. KLEJST: And if there were a change to a special
- 6 order dealing with, for example, right-of-way protection that you
- 7 just mentioned --
- 8 CHIEF TABORN: Right.
- 9 MR. KLEJST: -- what's the process in place, again,
- 10 following your configuration management protocol within your
- 11 System Safety Program Plan to ensure that the change is
- 12 incorporated into the document and that document is distributed to
- 13 those who were directly affected by it as current employees and
- 14 those groups that are responsible for training new employees in
- 15 the area of concern for that particular special order?
- 16 CHIEF TABORN: We will, again, submit that
- 17 recommendation, that draft change or rule to the Tri-State
- 18 Oversight Committee, seek their approval to incorporate it. If,
- 19 in fact, they approve the new rule, the new order, then we will
- 20 accept that, put it into our rulebook, disseminate it to our
- 21 employees and then have the training that speaks to that
- 22 particular rule in place.
- 23 MR. KLEJST: So each of the departments are responsible
- 24 for reviewing their own documents, such as the maintenance group
- 25 is responsible for ensuring that their maintenance procedures are

- 1 accurate and revised as necessary; if there's a need for a change
- 2 in an operating practice or an operating procedure, Rail Delivery
- 3 would be responsible for those functions?
- 4 CHIEF TABORN: That particular department would be
- 5 probably one of the leaders of it, but it would also include
- 6 Safety. If there's any safety component that's related to that
- 7 particular rule or change, then Safety would be involved in the
- 8 whole discussion, the whole review, but the expertise would
- 9 necessarily come from that particular department as the leader.
- 10 MR. KLEJST: And that department would be responsible
- 11 for distributing it to all of those groups that are affected by
- 12 that change?
- 13 CHIEF TABORN: There is a process in place that we
- 14 disseminate all rules, and again, it would be in conjunction with
- 15 operations. Once the rule is adopted, then we formally distribute
- 16 it to make sure that every employee who has a role in that
- 17 particular area will get the new rule, and then that's also
- 18 connected to the training so that the training will be associated
- 19 with that particular rule.
- 20 MR. KLEJST: You mentioned we. Would that be we as
- 21 WMATA or we as the safety department?
- 22 CHIEF TABORN: We, safety, in conjunction with
- 23 operations.
- MR. KLEJST: So ultimately, the safety department is
- 25 ensuring or accountable to ensure that if a document is changed

- 1 that the proper distribution does take place?
- 2 CHIEF TABORN: Absolutely.
- 3 CHAIRMAN SUMWALT: Thank you. I know that the Technical
- 4 Panel has more questions, but we've been in here for two hours,
- 5 and so I'd like to break for 15 minutes. That's the clock I go
- 6 by, so let's be back at 10 after 11:00. Before everybody gets up,
- 7 the restrooms, you know where they are. There are limited
- 8 restrooms here. If you want to get out and take a walk, if you go
- 9 upstairs, up the escalator, down to the glass pyramid-shaped
- 10 skylight, either turn left or right, there are restrooms down on
- 11 either ends of those hallways down by McDonald's or the opposite
- 12 way.
- So we are in recess. We're in recess. We'll be back in
- 14 15 minutes.
- 15 (Off the record.)
- 16 (On the record.)
- 17 CHAIRMAN SUMWALT: Okay. We're back in session. And
- 18 for the record, Mr. Taborn was asked that WMATA furnish the
- 19 organizational charts to show the progression of changes over the
- 20 last five years, and for the record, if you will just -- the Board
- 21 is officially requesting that. Thank you.
- 22 CHIEF TABORN: Yes, sir, I will.
- 23 CHAIRMAN SUMWALT: Thank you. Okay. We will now go to
- 24 Mr. Southworth on the Technical Panel for questions.
- MR. SOUTHWORTH: Thank you. Good morning, everyone.

- 1 CHAIRMAN SUMWALT: Good morning.
- 2 MR. SOUTHWORTH: I have a few questions that relate to
- 3 49 C.F.R. 659 and 49 C.F.R. 840 regarding notification when
- 4 there's an accident. What procedures are in place for Metrorail
- 5 to use for reporting accidents as defined? First, we'll start
- 6 with 659, and again this is at the time of the accident on June
- 7 22nd. What procedures were in place for Metrorail that they used
- 8 to comply with 49 C.F.R. 659.33, with particular attention to
- 9 reporting accident information to the Tri-State Oversight
- 10 Committee? And this is for Mr. Taborn.
- 11 CHIEF TABORN: Well, in accordance to 49 C.F.R. 659.33,
- 12 we notified the Tri-State Oversight Committee within that two-hour
- 13 time limit to report the fatality, the accidents and things of
- 14 that nature. We also notified the National Transportation Safety
- 15 Board in accordance with their notification procedures.
- 16 MR. SOUTHWORTH: And that notification to the Safety
- 17 Board, other than the calls and pages that I get directly, are you
- 18 talking about response to the National Response Center under 840?
- 19 CHIEF TABORN: To be perfectly honest, with respect to
- 20 that particular incident, I don't know if they notified the
- 21 National Response Center or directly to the NTSB. I don't know.
- 22 The chief safety officer at that time indicated that the NTSB as
- 23 well as the Tri-State Oversight Committee were both notified, but
- 24 what method, I don't know. I was speaking to the regulations that
- 25 is prescriptive as to how that notification takes place.

- 1 MR. SOUTHWORTH: Okay. Does the Tri-State Oversight
- 2 Committee investigate accidents that occur on Metrorail in
- 3 concurrence with 659 or has it authorized Metrorail to conduct
- 4 those investigations on their behalf?
- 5 CHIEF TABORN: It can. In accordance with 659, they
- 6 have the latitude to ask the transit agency to investigate the
- 7 accident. We have to submit that to the oversight agency for
- 8 their approval. But more often than not, they take the
- 9 investigation, and in the case of an NTSB investigation, it is
- 10 that investigation that they will receive.
- 11 MR. SOUTHWORTH: Are there ever investigations initiated
- 12 by TOC that are not satisfied by your investigation or your
- 13 investigation results accepted?
- 14 CHIEF TABORN: We will always do an internal
- 15 investigation and submit it. So it's independent. They may do a
- 16 side investigation if in fact it doesn't coincide with theirs.
- 17 They have every right in accordance to their structure to do a
- 18 separate and distinct investigation, but more often than not -- we
- 19 may get some comments back on a particular aspect of the
- 20 investigation, so for a accuracy standpoint, we will clarify those
- 21 types of misstatements. But they usually accept -- or in the
- 22 past, they've accepted accidents on the part of WMATA, those
- 23 investigations.
- 24 MR. SOUTHWORTH: And other than what's specified
- 25 currently, right now in 49 C.F.R. Part 659.33, are there any other

- 1 requirements that Metrorail has for reporting to TOC on accidents
- 2 or incidents? In other words, in addition to what's required in
- 3 659.33.
- 4 CHIEF TABORN: Well, as a normal practice, security-
- 5 related issues, we have a common practice with the electronic
- 6 Blackberries. We will share with the oversight agency things that
- 7 we feel are important that we need to share that are maybe outside
- 8 of those prescribed, the requirements.
- 9 MR. SOUTHWORTH: I don't have any further questions
- 10 right now at this time.
- 11 CHAIRMAN SUMWALT: Okay. Are there additional questions
- 12 from the Technical Panel? Please proceed. Mr. Gura? Mr. Watson?
- 13 Mr. Downs? Mr. Narvell?
- MR. NARVELL: Yes.
- 15 CHAIRMAN SUMWALT: Thank you.
- 16 MR. NARVELL: I have a few follow-up questions based on
- 17 Mr. Klejst's questioning, and the first one will be geared to Mr.
- 18 Benjamin. Mr. Benjamin, when you were talking about the board of
- 19 directors at WMATA, who comprises the board of directors?
- 20 MR. BENJAMIN: The board of directors are defined by an
- 21 interstate compact that has been approved by the State of
- 22 Maryland, the Commonwealth of Virginia, the District of Columbia
- 23 and the Federal Government. It has recently been modified
- 24 slightly in terms of the directors. There are four directors from
- 25 each one of those jurisdictions, four from Maryland, four from

- 1 D.C., four from Virginia and now the Federal Government has the
- 2 right to also appoint four. Two of those are voting directors.
- 3 Two of those are alternates in each case.
- 4 MR. NARVELL: Okay. So when you say that, would the FTA
- 5 have membership on the board then and would the TOC have
- 6 membership on the board?
- 7 MR. BENJAMIN: If the Federal Government wanted to
- 8 appoint somebody from FTA to our board, at this point they could
- 9 do that.
- 10 MR. NARVELL: Okay. Presently, there is none though?
- 11 MR. BENJAMIN: At the present time, there are no members
- 12 of either the FTA or the TOC on our Board.
- 13 MR. NARVELL: Okay. And earlier you were talking about
- 14 budget. Was it annual budget of \$11 billion?
- MR. BENJAMIN: No, that's our capital budget needs over
- 16 10 years. Our annual budget for operating is about \$1.5 billion,
- 17 a little bit less than that, and our capital budget on an annual
- 18 basis is between 500 and \$600 million.
- 19 MR. NARVELL: Okay. Of that 1.5, is that a breakdown
- 20 between both bus and rail or is that a combination of both?
- 21 MR. BENJAMIN: It's a combination of bus, rail and Metro
- 22 Access, our paratransit service.
- 23 MR. NARVELL: What portion of that percentage-wise, do
- 24 you have any idea, percentage of all three?
- 25 MR. BENJAMIN: Metro Access is about \$100 million and

- 1 the others are split. I think bus and rail are probably split
- 2 roughly evenly but I'd have to look it up. I could do it very
- 3 quickly.
- 4 MR. NARVELL: Okay. Now, this questioning would -- is
- 5 part of my technical portion, would be going to Mr. Kubicek.
- 6 Mr. Kubicek, I want to get a better understanding on the
- 7 WMATA system safety oversight, and the way I understand it, the
- 8 System Safety Program Plan is comprised of standards that comes
- 9 from each of your different divisions that you direct; is that
- 10 correct?
- 11 MR. KUBICEK: Yes, sir.
- MR. NARVELL: Okay. And once you have these standards
- 13 in place, each department has their own oversight group as far as
- 14 inspectors; is that correct?
- 15 MR. KUBICEK: From a structure standpoint, each
- 16 department has, you know, department heads, managers, supervisors,
- 17 managers, but I do have an independent quality group, OC group
- 18 that reports to me as well. And, so between the combination of
- 19 each independent department being self-governed, you have an
- 20 independent quality component that is there as well, as well as
- 21 we're working with our safety department or any other oversight
- 22 group, you know, depending on what takes place in each discipline.
- 23 MR. NARVELL: Okay. So I'm going to use mechanical and
- 24 track or signal as an example, those three functions. Each of
- 25 those functions have a program in their plan that they're supposed

- 1 to maintain, and they have track inspectors, mechanical
- 2 inspectors, signal inspectors that conduct an inspection. Now,
- 3 does the quality control, are they part of that group or are they
- 4 separate and parallel to them that answer to you?
- 5 MR. KUBICEK: They are independent.
- 6 MR. NARVELL: Okay. So they're not part of that. So do
- 7 they go in and do they quality control it? You know, like if a
- 8 guy is out there maybe having track warrant -- let's say, track
- 9 workers' authority and does he go out there to make sure that he
- 10 has the proper protection for on-track workers? Does he do things
- 11 like that?
- MR. KUBICEK: Yes, there is an independent effort
- 13 applied besides the normal respective departments.
- 14 MR. NARVELL: Okay. Now, does the System safety
- 15 department have a parallel oversight of that or do they kind of
- 16 handle the paperwork function of that, that you supply them and
- 17 oversee the paperwork?
- MR. KUBICEK: We provide, you know, our information, you
- 19 know, to them. Let's say, for instance, for safety department, if
- 20 you were talking about a track location, to make sure that
- 21 everybody had their respective materials, you know, safety PPE
- 22 there, it is not uncommon also for Safety to show up as well
- 23 independent of a quality function or management structure as well.
- 24 MR. NARVELL: Okay. I'm going to call these more like
- 25 efficiency tests, you know, make sure everybody's doing what

- 1 they're supposed to be doing. Do you have any idea how often that
- 2 occurs? Is this like a daily thing, monthly thing, weekly thing?
- MR. KUBICEK: Well, between all of the departments, we
- 4 have monthly activities. Some might have to occur daily. Say,
- 5 for instance, our transportation component, there are daily checks
- 6 that they're working to keep their quota going. If it's more site
- 7 specific, that could be more of a weekly basis or a little bit
- 8 extended period of time.
- 9 MR. NARVELL: Okay.
- 10 MR. KUBICEK: And if I could, just for a matter of
- 11 record, I was corrected. My employment tenure date for WMATA was
- 12 May of 2007, not May of 2009.
- MR. NARVELL: When you have your System Safety Program
- 14 Plan, can any state or federal agency tell or suggest to WMATA
- 15 that additional maintenance standards are necessary, that they
- 16 say, and what's that process?
- MR. KUBICEK: Yes. We go through normal, you know,
- 18 audit processes just like any other authority in the United States
- 19 goes through.
- 20 MR. NARVELL: I don't want to interrupt you, but you're
- 21 talking about your annual and triennial audits; is that it?
- MR. KUBICEK: Yes, sir.
- MR. NARVELL: Okay.
- 24 MR. KUBICEK: Yes, sir. And during the course of it, if
- 25 somebody was to approach us, you know, early on, you know, with an

- 1 unsolicited, you know, question or comment, because being here in
- 2 D.C. we do get a lot of, you know, impromptu questions or comments
- 3 about how we're doing things and why we're doing things, we
- 4 entertain those.
- 5 MR. NARVELL: Does the safety department or does the
- 6 quality department investigate accidents or near misses?
- 7 MR. KUBICEK: Yes.
- 8 MR. NARVELL: Which one? The safety department and
- 9 Quality or both?
- 10 MR. KUBICEK: Generally both.
- 11 MR. NARVELL: That's all I have right now.
- 12 CHAIRMAN SUMWALT: Okay. Additional questions from the
- 13 Technical Panel? Mr. Watson?
- 14 MR. WATSON: Thank you, and good morning. My questions
- 15 will go to Mr. Kubicek. Are you familiar with the equipment
- 16 standards at WMATA?
- 17 MR. KUBICEK: Yes, sir.
- MR. WATSON: And are those federally-mandated standards?
- 19 MR. KUBICEK: There are federal, local and state
- 20 functions, yes.
- MR. WATSON: And can you kind of explain how those work
- 22 together?
- 23 MR. KUBICEK: For the most part, whenever you sustain,
- 24 say, for instance, a piece of equipment or a system, you're going
- 25 to go through an engineering, you know, design review, a process

- 1 of what are you needing it to do, and then the other component
- 2 would be how often you'd have to maintain it, to what engineering
- 3 standards is it designed to, and then you go through a process of
- 4 inspection and maintenance for that piece of equipment and/or
- 5 system to be able to sustain it over the lifecycle of its, you
- 6 know, course. Since we do have a lot of systems that extend
- 7 decades, you know, you go through retrofits; you go through
- 8 modifications. You have engineering modification instructions.
- 9 You have test plans because equipment and systems are always in
- 10 the need of, you know, constant state of repair and updates, and,
- 11 you know, through that process, you have to meet, you know,
- 12 certain technical quidelines and federal standards.
- 13 MR. WATSON: And is the oversight for that equipment
- 14 process, those standards, is that mostly internal, WMATA driven
- 15 kinds of things or is there guidance given from federal agencies
- 16 of different types?
- 17 MR. KUBICEK: We do have certain standards, but where
- 18 the main focus of us would be -- like with our original equipment
- 19 manufacturers, the individuals that supply us these respective
- 20 systems, all the systems that you generally get are going to come
- 21 with some type of, you know, recommendation from the vendor and
- 22 then we would be required to maintain, you know, that piece of
- 23 equipment to that level of criteria or based on our experience,
- 24 depending upon how it's applied. Then the federal component, you
- 25 know, they would come in to make sure that we're following up, or

- 1 state or local would make sure that we're complying with OEM, as
- 2 well as they could provide any additional insight, you know, from
- 3 their perspective or experience on the feedback they've seen for
- 4 these systems to be maintained properly.
- 5 MR. WATSON: I understand. And in your experience, that
- 6 process, is that typical throughout the transit industry?
- 7 MR. KUBICEK: Yes, sir, my experience to date, yes.
- 8 MR. WATSON: Yeah. I want to talk about staff levels
- 9 and specifically for equipment maintenance. Do you know what kind
- 10 of a breakdown you've got as far as mechanics and supervisors and
- 11 managers today?
- MR. KUBICEK: For which department?
- 13 MR. WATSON: Specifically for equipment maintenance.
- MR. KUBICEK: For railcar maintenance?
- MR. WATSON: Yes.
- 16 MR. KUBICEK: We have approximately about 900
- 17 technicians. We have approximately about 70 to 80 supervisors,
- 18 and we probably have in the neighborhood of about 20 to 25
- 19 management officials, and probably about 20 administrative support
- 20 staff in there.
- 21 MR. WATSON: All right. And the experience levels of
- 22 those various folks, the technicians, the wrench spinners, do they
- 23 go through some kind of a qualification process, an apprenticeship
- 24 or some kind of formal training to qualify on the jobs that they
- 25 perform?

- 1 MR. KUBICEK: Yes, we do have different training. We
- 2 have different crafts within our organization, you know, as far as
- 3 mechanic level, skill set. There is different training like, for
- 4 example, on door systems, on brake systems, on propulsion systems.
- 5 Since we do have several different series of cars, you have to
- 6 work through that process of getting all your employees, you know,
- 7 trained on the various systems and equipment that we have.
- 8 MR. WATSON: And as far as experience, where do you draw
- 9 your supervisory and managerial staff from? Is that from the
- 10 ranks or where from?
- MR. KUBICEK: It's a combination. We typically do draw
- 12 from the ranks but we do also recruit from other entities, other
- 13 agencies as well.
- 14 MR. WATSON: All right. And your personal comfort level
- 15 -- those folks all report to you in some fashion or other; is that
- 16 right?
- MR. KUBICEK: The head of maintenance does report to me
- 18 directly, and then the cascading goes down from there.
- 19 MR. WATSON: Sure. And your comfort level, are you
- 20 comfortable both with the staffing level and the experience that
- 21 you've got currently at WMATA?
- 22 MR. KUBICEK: We've got experienced folks. I would say
- 23 that we are experiencing the same thing as any other transit
- 24 authority in the United States is. We would always like to have
- 25 more resources. We would always like to have more staffing, you

- 1 know, more funding. We do have a good dedicated workforce here.
- 2 We do have a lot of individuals that are tenured to resign, just
- 3 like any other place that I experience or talk with. You know,
- 4 that's where our training, our refresher training, bringing in new
- 5 technology, bringing the newer workforce up to speed as fast as
- 6 possible is a great concern and a great effort on our part,
- 7 because we do have some skill set that has been here from day one
- 8 and those individuals are posed to retire.
- 9 MR. WATSON: Okay. And you have a transition plan in
- 10 effect to take care of that; is that right?
- 11 MR. KUBICEK: We're working on it as aggressively as
- 12 possible.
- MR. WATSON: All right. Talking about resources, again
- 14 we're talking about car maintenance and things relative to the
- 15 cars. Do you have a general number as far as what your budget is
- 16 for the equipment maintenance?
- MR. KUBICEK: Not off of the top of my head. I know
- 18 operationally I'm a little bit over half a billion dollars, but
- 19 that would include all of my departments, track and structures and
- 20 such.
- MR. WATSON: All right. And I know your tenure has been
- 22 relatively short, but I'm sure you probably have had an
- 23 opportunity to see what it has been. Have there been any dramatic
- 24 increases or decreases in that funding in the past years?
- MR. KUBICEK: No increases.

- 1 MR. WATSON: Any decreases?
- 2 MR. KUBICEK: We have seen reductions in our budget.
- 3 MR. WATSON: Significant reductions?
- 4 MR. KUBICEK: I'm not going to say that they're
- 5 significant, but for me, any reduction in our operational
- 6 environment, you know, on my part, could be classified
- 7 significant. But not to the stage to alarm anybody at this time,
- 8 but they do present challenges for us.
- 9 MR. WATSON: And that's the follow-up question. Again,
- 10 your comfort level, you know, are you comfortable that you can do
- 11 those things that you need to do with the budget that you have
- 12 now?
- 13 MR. KUBICEK: Working with the budget that we have,
- 14 we're working within the parameter of our service level, you know,
- 15 requirements. It does stress us a little bit thinner than what we
- 16 would like to be stressed but, you know, we have to maintain our
- 17 system configurations to the best of our ability. And sometimes
- 18 that does impact our service, you know, because if we're not able
- 19 to, say, for instance, effectively inspect a piece of equipment,
- 20 depending upon the nature of the system we're looking at, you
- 21 know, we would hold it out.
- MR. WATSON: All right. We're going to come to that.
- 23 Do you have a specific goal for the number of cars that you want
- 24 to make ready for service on a given day?
- MR. KUBICEK: Right now our service level, we deploy 850

- 1 railcars a day for A.M. and P.M. peak service. So based on the
- 2 level of staffing and budget and stuff that we have, that's what
- 3 we're focused on. As we continue to increase, you know, our
- 4 railcar deployment upwards, naturally, we're going to be looking
- 5 for additional staff, you know, additional resources, to be able
- 6 to sustain that. Also, with the amount of railcars that we do
- 7 have here -- you know, we have various age of fleets. You know,
- 8 you have some stuff that's, you know, 30 plus years in age and you
- 9 have some stuff that's, you know, 4 or 5 years of age. So each
- 10 one of these pieces of equipment get drawn into different
- 11 lifecycle needs.
- MR. WATSON: And is that 800 cars, 800 plus, whatever it
- 13 turns out to be, is that given as a percentage of the fleet?
- 14 MR. KUBICEK: Right now we have about a -- budgeted, we
- 15 have about 1142 railcars, you know, in our overall fleet. So
- 16 we're deploying about 850 right now, so you're looking at, you
- 17 know, a spare ratio of well-above 20 to 25 percent. But as we
- 18 continue to move towards, you know, 50 percent 8-car trains, we'll
- 19 get ourselves into a spare ratio of between 20, 22 percent.
- 20 MR. WATSON: All right. And that 20 to 22 percent, is
- 21 that typical throughout the industry?
- 22 MR. KUBICEK: Rule of thumb, on the industry, you know,
- 23 when you first see a system start out, they're going to use a
- 24 system of, you know, 18 to 20 percent because it's relatively new,
- 25 but then as the systems start aging, you've got to start rehabbing

- 1 railcars. That two or three percent that you increase over the
- 2 top is your float, so that way you can properly, you know, cycle
- 3 your equipment while you're trying to maintain revenue. So it's a
- 4 maturity process. You know, the system first starts out, again,
- 5 new. Everything works a little bit better. But then when you
- 6 start getting into age, you've got to expand your resources, so
- 7 that way you can sustain your existing levels.
- 8 MR. WATSON: And with the existing fleet and the
- 9 existing maintenance staff that you have, do you meet your goals
- 10 on a daily basis?
- 11 MR. KUBICEK: We do a good job of meeting our goals. We
- 12 do have our challenges, you know, at times, just like any other
- 13 transit authority would, but again, as we continue to look to
- 14 increasing our deployment on a regular basis, that's where we're
- 15 going to need the support for additional staff and funds.
- 16 MR. WATSON: And who sets those specific goals, that 850
- 17 cars, you know, give or take, that you need deployed on a peak
- 18 service time? Is that you or where is that set?
- 19 MR. KUBICEK: I play a role in that. That's a very
- 20 complex process. You know, we have a scheduling group. We have a
- 21 planning group. We have, you know, feedback from transportation.
- 22 You're looking at your loading grid, you know, of certain areas.
- 23 It's an ever evolving, you know, process, but we are heavily
- 24 involved in it.
- MR. WATSON: All right. I'd like to talk a little bit

- 1 about brake maintenance specifically on the cars. And are you
- 2 familiar with how brake maintenance is scheduled?
- 3 MR. KUBICEK: Yes, sir, I am.
- 4 MR. WATSON: Okay. And is there a process for deferring
- 5 the brake maintenance on a car?
- 6 MR. KUBICEK: Can you expand on deferral?
- 7 MR. WATSON: Yeah, you've got a car that -- well, let's
- 8 go the other way. Do you know if any brake maintenance was
- 9 deferred on the cars involved from the striking train in the Fort
- 10 Totten accident?
- 11 MR. KUBICEK: Yes.
- 12 MR. WATSON: Yes, there was or yes, you know.
- 13 MR. KUBICEK: Yes, there was maintenance deferred.
- MR. WATSON: Okay. And do you know what the maintenance
- 15 related to?
- 16 MR. KUBICEK: Well, what the maintenance have -- you
- 17 have several different functions working with these systems.
- 18 First of all, you have daily brake checks. Then we also have
- 19 regular intervals like 30-day checks, 60-day checks, 90-day
- 20 checks, where you go into each system, you know, in much more
- 21 greater detail.
- The maintenance that's referenced as being deferred is
- 23 in regards to a heavy overhaul process. Whenever you get into
- 24 heavy overhaul process, that gets into where you might take down
- 25 an entire subsystem, depending upon the availability of your parts

- 1 and materials. A lot of times whenever you're doing these heavy
- 2 brake overhauls, it's also about extending the life of the asset
- 3 as well.
- 4 So it's not necessarily the performance. If we had a
- 5 performance issue, for example, on the railcars that were
- 6 operating that day, they would have been held out of service
- 7 because they wouldn't have met, you know, basic daily safety
- 8 checks. And the equipment that we were looking at is a long lead
- 9 time item. As a lot of people are aware, we deal with some very
- 10 sophisticated pieces of equipment and we don't have a lot of
- 11 vendors out there that really provide the materials.
- 12 So that in itself is kind of a summarization of what
- 13 you're challenged with on a regular basis as well as working with
- 14 a time-based maintenance philosophy. There's room to gauge when
- 15 exactly you're supposed to start it as well as when you're
- 16 supposed to complete a program as well.
- 17 MR. WATSON: And if you could characterize your
- 18 understanding of the items that were deferred on the striking
- 19 train, that deferral, would that have had a detrimental effect on
- 20 the braking performance of that striking train?
- MR. KUBICEK: Absolutely not.
- 22 MR. WATSON: Okay. And had it, would that have been
- 23 held out of service?
- 24 MR. KUBICEK: If that piece of equipment during its
- 25 daily functions would have failed one of the daily checks, it

- 1 would have been held out of service.
- MR. WATSON: And who has that authority? Is that the
- 3 mechanic or --
- 4 MR. KUBICEK: At the technician level, at the supervisor
- 5 level, at the manager level, superintendent level. If somebody
- 6 sees where we have a piece of equipment that does not meet certain
- 7 operational criteria, they are to hold it out until it's resolved.
- 8 MR. WATSON: Okay. And then I'd like to talk just
- 9 briefly about event recorders, and in a global manner, not
- 10 necessarily any equipment that was on any specific train at any
- 11 time. But generally, does WMATA equip the cars with event
- 12 recorders?
- MR. KUBICEK: We have a mixed bag of fleets here. So we
- 14 have some railcars that do have event recorders and we have some
- 15 that do not.
- 16 MR. WATSON: And are there any federal standards or
- 17 requirements that WMATA's equipment be equipped with event
- 18 recorders?
- 19 MR. KUBICEK: Not that I'm aware of.
- MR. WATSON: All right. And does WMATA have an
- 21 inspection schedule for those cars that are equipped?
- MR. KUBICEK: Yes.
- 23 MR. WATSON: Okay. And can you tell me what that is?
- MR. KUBICEK: Again, we would go through like a 30-day
- 25 check, a 60-day check, a 90-day check of those pieces of

- 1 equipment.
- MR. WATSON: Uh-huh. And based on, again, a general
- 3 understanding, how is their overall reliability?
- 4 MR. KUBICEK: The systems that we have, they're
- 5 maturing. I mean, you have some systems that are -- more
- 6 challenges than others. I would say that as we get more
- 7 experience with these systems and based on the environment which
- 8 they're placed in, they're becoming a lot more reliable than what
- 9 they typically did early on in their lifecycle.
- 10 MR. WATSON: And is there a reliability comparison
- 11 between the older series of cars and the newer series of cars? Do
- 12 the newer ones perform better?
- MR. KUBICEK: Yeah, we do have reliability data and, you
- 14 know, when you look at the major subsystems and such, you know,
- 15 our newer equipment on average, you know, is performing better and
- 16 continues to improve than our older pieces of equipment.
- MR. WATSON: Were there performance standards or
- 18 contractual standards set by WMATA at the time that you bought the
- 19 event recorder?
- 20 MR. KUBICEK: There were performance standards for
- 21 various equipment, yes.
- 22 MR. WATSON: All right. And then in the event that an
- 23 event recorder fails, for whatever reason, and it's on the ready
- 24 track and, you know, the car is set for service, you've got
- 25 customers standing on the platforms, is the failure of an event

- 1 recorder cause to withhold a car from service?
- MR. KUBICEK: The practice here is, no, because the
- 3 event recorder collects information through a host of systems, but
- 4 it's not mission sensitive or it's not, I should say, a safety
- 5 sensitive product like a propulsion or a brake. The propulsion
- 6 systems and your braking systems, they do have various levels of
- 7 intelligence that you can also draw information from incase an
- 8 event recorder was not functioning properly.
- 9 MR. WATSON: Yeah, I understand. And in the event that
- 10 that does occur, that you've got, you know, a car that's
- 11 mechanically reliable and good to go, it just doesn't have a
- 12 working event recorder, who has the authority to authorize the
- 13 dispatch of that particular car?
- 14 MR. KUBICEK: That would be made at the shop level, at
- 15 the maintenance level. I'm sure that they would make the
- 16 announcement, you know, to notify what's taking place, but that
- 17 would be conducted at the maintenance level.
- 18 MR. WATSON: Okay. Thank you. A couple of final
- 19 questions. New equipment acquisition, and I don't want to tread
- 20 on what Mr. Downs is going to ask you just in a bit, because he's
- 21 got a lot of techy stuff. But in general, do you have -- I'm
- 22 getting the hook here. Do you have plans to get new equipment?
- MR. KUBICEK: Yes.
- 24 MR. WATSON: And generally speaking, what is that and
- 25 what time frame?

- 1 MR. KUBICEK: We do have a railcar procurement that's
- 2 called the 7000 Series. For us, it's the next generation of
- 3 railcar to be introduced here at the agency. It's something that
- 4 will be totally different than what we've seen here to date. We
- 5 are scheduled to go before our board in March of 2010 to make
- 6 recommendations and begin the procurement process of new rolling
- 7 stock.
- 8 MR. WATSON: And have you got a general timeline on the
- 9 horizon when you'd expect that would actually be in service?
- 10 MR. KUBICEK: In service, you're probably looking 30 to
- 11 36 months before you see the first, you know, pilot car on site.
- 12 And then 6 months after that, that's when we would begin accepting
- 13 these railcars, and based on our delivery schedule, we're looking
- 14 at a monthly delivery rate of upwards of 14 to 20 railcars a
- 15 month.
- 16 MR. WATSON: And is that already budgeted or is that in
- 17 the process?
- MR. KUBICEK: That's in the process of being budgeted.
- 19 They're going through an effort of, you know, fully funding
- 20 everything but the model is there.
- 21 MR. WATSON: We have a follow-up here from one of the
- 22 guys. What happens in the event an event recorder fails the 30-,
- 23 60-, 90-day check?
- 24 MR. KUBICEK: On that right there, whenever it would go
- 25 through an inspection on a solid, it would be held out of service.

- 1 MR. WATSON: Okay. Last question from me, new
- 2 maintenance facilities. I know that you've got maintenance
- 3 facilities and they're, you know, dedicated to different series of
- 4 equipment, but have you got anything new on the horizon? Do you
- 5 plan on expanding what you're able to do?
- 6 MR. KUBICEK: Yes, sir. We do have a -- for example,
- 7 we're going through the addition of the Dulles program. So we're
- 8 going to see some additional tracks and yard and facility at our
- 9 West Falls Church. Our other component is with our new 7K railcar
- 10 program, we're going to be getting a test track and commissioning
- 11 facility. The reason behind that is that with us trying to
- 12 conduct maintenance on a very tight timeline, it's going to permit
- 13 us to run independently 24/7, a much more effective, you know,
- 14 acceptance program and have a different facility to house all of
- 15 the engineers and specialists and stuff that are going to be
- 16 associated with that.
- 17 As part of our capital overview program, we're also
- 18 looking at the expansion of some of our shops, more specifically,
- 19 you know, to some of our yards. That gets out into the out years
- 20 as the funding and such, you know, becomes available.
- 21 The other component that I'd also add is -- with the new
- 22 railcar procurement is that it really goes through the mindset of
- 23 a 10-year forecast. We're not only looking at our growth, but
- 24 we're also looking at our rehab and we're looking at our
- 25 replacement. This is one of the first times that I've been told

- 1 here that it's been this detailed, and it's a very effective tool
- 2 for us to start communicating, you know, on these long-term bases
- 3 instead of getting ourselves into an environment where we're
- 4 buying 100 cars here and 100 cars there. We're really working on
- 5 trying to standardize our equipment as much as possible because
- 6 that helps us from a training perspective for our operators and
- 7 for our technicians, as well as our customer, because it's going
- 8 to naturally improve the reliability of our service.
- 9 MR. WATSON: All right. Well, thank you very much. I
- 10 appreciate your answers. Thank you. That's all that I have.
- 11 CHAIRMAN SUMWALT: Thank you, Mr. Watson.
- 12 Mr. Narvell, I understand you have some questions.
- 13 MR. NARVELL: Yes, sir. Thank you, Mr. Sumwalt.
- 14 Good morning, gentlemen. I actually have just a few
- 15 questions for each of you. Mr. Catoe, we'll start with you.
- 16 Does WMATA set the safety culture from the top? And if
- 17 so, how's that achieved?
- 18 MR. CATOE: The safety culture is set throughout the
- 19 organization, but let's talk about from the top. I communicate
- 20 several ways with every employee in the agency, through letters,
- 21 e-mails, personal visits to every work site, through managers,
- 22 through goals and objectives, to communicate the safety of the
- 23 agency. And I re-communicate that on an ongoing basis, whether we
- 24 have an event or not have an event.
- I have constantly communicated, since my arrival, that

- 1 safety is the number one priority and brought in a firm, DuPont,
- 2 to assist us with that process over a five-year period.
- MR. NARVELL: Okay. Given the current fiscal
- 4 constraints, do you feel that there's adequate funds for training,
- 5 particularly safety training, within WMATA?
- 6 MR. CATOE: We do not have an option whether we should
- 7 train our employees or not, and as a result, I increased the
- 8 training budget for the proposed FY '11 budget. It means,
- 9 depending from a policy standpoint, we're going to have to find
- 10 new revenues from various sources or we're going to have to reduce
- 11 service, but we cannot and I will not allow us to reduce our
- 12 training budget. So we have to make other cuts in order to
- 13 accommodate the increases that we have put in for safety training.
- MR. NARVELL: Okay. Thank you.
- 15 Mr. Kubicek, if you can respond to this, if you can, how
- 16 are the track, mechanical, signal and operational maintenance
- 17 standards chosen? And is there guidance in 659 relative to this?
- 18 MR. KUBICEK: How are they selected?
- MR. NARVELL: Yes, sir.
- 20 MR. KUBICEK: Okay. Could you be specific on one item?
- 21 That way I can work my way through.
- MR. NARVELL: Okay. Well, let's go down the list here.
- 23 We'll start with -- this was just presented to me. We'll start
- 24 with track.
- 25 MR. KUBICEK: Okay. From a track maintenance standard,

- 1 typically, you know, the minimum baseline that's referenced is
- 2 your FRA standards.
- 3 MR. NARVELL: Uh-huh.
- 4 MR. KUBICEK: As we all know, the standards that we have
- 5 to utilize in our environment have to be a little bit more
- 6 sensitive because of our equipment, you know, weight, the accuracy
- 7 of it has to be factored in. So those are the baseline, you know,
- 8 minimum standards that you begin your process with.
- 9 Then your maintenance functions, it really gets down
- 10 into the type of infrastructure that you have. We have a lot of
- 11 design fix which is direct fixation into concrete. You know, we
- 12 have railroad ties. We have a lot of structures. So then you
- 13 also have to review -- in respective areas, some counties have
- 14 some influence on your structures and some do not. So that would
- 15 be the beginning of that process.
- 16 MR. NARVELL: Okay. Did we address mechanical and
- 17 signal or not? We talked about track there.
- MR. KUBICEK: We talked about track.
- On the signaling aspect, as we know, that's an extremely
- 20 specialized field. You really rely very aggressively on your
- 21 original equipment manufacturers that, you know, provide you these
- 22 systems, you know, working with them. There could be some, you
- 23 know, quidelines as far as best practices where you might see from
- 24 the American Public Transportation Association, where they're, you
- 25 know, putting in various minimum standards, minimum guidelines, as

- 1 that area works to increase. But that's where the primary focus
- 2 would be as the beginning of your maintenance standards and your
- 3 engineering efforts.
- 4 MR. NARVELL: Okay. Thank you.
- 5 Chief Taborn, is there a database for long-term tracking
- 6 of safety reports and issues at WMATA?
- 7 CHIEF TABORN: Currently, that does not exist. But,
- 8 again, working with Mr. Kubicek, we are developing a one database
- 9 system that will incorporate and house all of the information that
- 10 comes from a variety of different departments so that we will be
- 11 in a better position to do an independent analysis from various
- 12 sources, including that of safety, OIG, and the likes. But that
- 13 database does not exist currently.
- MR. NARVELL: Okay. Thank you.
- 15 Mr. Benjamin, last but not least. Earlier you
- 16 referenced a group that's being assembled that's consisting of
- 17 folks from DOT, AFL-CIO and APTA. If you know, do you know any of
- 18 the areas of expertise that this group is going to bring to the
- 19 table? And if so, could you elaborate on that?
- 20 MR. BENJAMIN: The people who are coming are people who
- 21 are suggested by the various administrations, and give me a second
- 22 here. One of the people has got a strong background in Federal
- 23 Railroad activities and has got a very strong background with
- 24 innercity rail; one of them with accident investigation for the
- 25 Federal Aviation Administration. Two of them will probably be

- 1 from the American Public Transportation Association and their
- 2 experts there; and one will be from the AFL-CIO, who is a person
- 3 who knows safety investigations very well and the relationship of
- 4 that to labor.
- 5 MR. NARVELL: Okay. Thank you.
- 6 One final question, Mr. Benjamin. You also indicated
- 7 earlier that essentially there's four entities or jurisdictions:
- 8 the District, Maryland, Virginia and the Federal Government. Has
- 9 there ever been a case where there's conflicting oversight
- 10 received from the different jurisdictions?
- 11 MR. BENJAMIN: When you say oversight, I'm not quite
- 12 sure what you mean.
- MR. NARVELL: Safety oversight. In other words, would
- 14 Maryland have different requirements than, say, the District or
- 15 Virginia or Federal Government?
- 16 MR. BENJAMIN: That's probably a question that you
- 17 should be asking the chief rather than myself.
- 18 MR. NARVELL: Chief Taborn?
- 19 CHIEF TABORN: Sir, I don't think so. I think the Tri-
- 20 State Oversight Committee is a body that is comprised of all three
- 21 of those jurisdiction and they come and speak with one voice, and
- 22 if there are some conflicts, they work it out themselves.
- 23 MR. NARVELL: Okay. Thank you. That's all the
- 24 questions I have.
- 25 CHAIRMAN SUMWALT: Thank you. I understand Rick Downs

- 1 has a few questions.
- 2 MR. DOWNS: Thank you. My topic area deals with the
- 3 System Safety Program Plan and emergency preparedness activities,
- 4 and I think it's probably best address by Chief Taborn. Does the
- 5 System Safety Plan prescribe for periodic emergency exercises and
- 6 training drills?
- 7 CHIEF TABORN: Yes, sir, it does.
- 8 MR. DOWNS: Generally what does this encompass? And
- 9 what I'm looking for here is, is what department conducts this,
- 10 what types of exercise, how often, who participates, that sort of
- 11 thing.
- 12 CHIEF TABORN: Okay. Currently now the emergency
- 13 management function of the Washington Metropolitan Area Transit
- 14 Authority rests within the Metro Transit Police Department. It's
- 15 a newly formed department thanks in part to the Federal Transit
- 16 Administration. We were one of the pilot groups that looked into
- 17 a transit agency having an emergency management department. That
- 18 department now works with all the departments within the WMATA
- 19 organization, works with the Council of Governments and the
- 20 District of Columbia and works with the Department of Homeland
- 21 Security. Many of those exercises and tabletop drills are a
- 22 result of funding that were received from them. They work on
- 23 continuity of operations, things of that nature, for the benefit
- 24 of the Transit Authority.
- 25 MR. DOWNS: Okay. Is the Tri-State Oversight Committee

- 1 involved in any of WMATA's emergency preparedness activities or
- 2 drills?
- 3 CHIEF TABORN: They should be, and I don't want to speak
- 4 to the fact that they've been made aware of some of those drills
- 5 recently, and they've been more than welcome to be a part of it,
- 6 as well as FTA and the other federal agencies.
- 7 MR. DOWNS: But it sounds like you're not quite sure as
- 8 to what the current activity status with TOC is?
- 9 CHIEF TABORN: Right. I don't want to speak to that
- 10 exactly. I can see heads shaking from the TOC, but again I just
- 11 want to be clear and maybe defer that to maybe representatives
- 12 from the TOC.
- 13 MR. DOWNS: Okay. We can address that later with the
- 14 TOC. Lastly, when was the most recent major exercise that you
- 15 conducted, and is there a next exercise scheduled?
- 16 CHIEF TABORN: If I'm not mistaken, there's an exercise
- 17 planned for this weekend, if I'm not mistaken. There's one that
- 18 involves the Arlington County Government, who is the lead in this
- 19 Department of Homeland Security grant, and it will incorporate a
- 20 variety of different exercises to include terrorist-related type
- 21 of situations, active shooters, things of that nature. We
- 22 consistently provide training and exercises to all of the member
- 23 jurisdictions through our Carmen Turner Training Facility where
- 24 there's a simulated tunnel and, thanks to the FRA, there's a
- 25 rollover train that's out in that particular area, and there are a

- 1 lot of tabletop exercises that take place there as well.
- MR. DOWNS: I see, and would you give us a little bit on
- 3 the most recent previous exercise that you're familiar with?
- 4 CHIEF TABORN: I can't tell you right off the top of my
- 5 head the previous one.
- 6 MR. DOWNS: Okay. Thank you. That concludes my
- 7 questions.
- 8 CHAIRMAN SUMWALT: Okay. I understand Mr. Klejst has an
- 9 additional line of questioning he'd like to get on, but before we
- 10 do that -- we will go to the parties, but before we do that, are
- 11 there any further questions from the Technical Panel at this time?
- 12 (No response.)
- 13 CHAIRMAN SUMWALT: Okay. We're going to move now to the
- 14 parties, and we will begin with the FRA, Mr. McFarlin.
- MR. McFARLIN: Thank you. And I apologize asking my
- 16 question not being able to face you very well. But just one,
- 17 really. We've heard a lot about performance, performance goals
- 18 and such, and I did not hear a lot about the measures of those.
- 19 What are some of the particular measures of performance from a
- 20 safety perspective?
- 21 CHIEF TABORN: There's a variety of different types of
- 22 measures. We're always in the process of developing them, and we
- 23 also reach out and work closely with the Federal Transit
- 24 Administration as they develop standards, as well as those
- 25 standards that are developed through APTA, the American Public

- 1 Transportation Association. Independently or internally to WMATA,
- 2 there are goals that we set that ensures that we comport with the
- 3 Tri-State Oversight Committee's implementation of the System
- 4 Safety Program Plan, the independent safety audits, the
- 5 independent security audits. So those are individual goals that
- 6 if we comply with those, if we reach those, then we are in concert
- 7 with the regulations that are set forth by 659.
- 8 MR. McFARLIN: Okay. I appreciate that. I'm thinking
- 9 specifically along the lines of so many fatalities per million
- 10 train miles, so many injuries per million train miles or the like,
- 11 in that regard. Do you have specific measures of that magnitude?
- 12 CHIEF TABORN: Well, we document that information. We
- 13 provide that information to the National Transit Database and that
- 14 information is compiled. That information -- that includes
- 15 suicides, things of that nature. We create initiatives to try to
- 16 address those. But with respect to reducing those in other ways
- 17 than a particular program, then sometimes it's difficult to
- 18 measure.
- We know that transit, in spite of what we're going
- 20 through today, is one of probably the safest modes of
- 21 transportation throughout the industry, but one death or one
- 22 injury is one injury and one death that's too many. But we work
- 23 in a concerted fashion to make sure that, again, that we make
- 24 every effort to make sure that working with our federal partners,
- 25 our Tri-State Oversight, internally, that we reduce as many of

- 1 those accidents as possible. And the safety culture that was
- 2 brought up today is something that is unique and gets to the heart
- 3 of things that are applicable to all transit agencies and probably
- 4 all transportation agencies, is that how do you get to that point
- 5 that you have a culture. And we've been in the process of
- 6 conducting interviews for the chief safety officer, and one of the
- 7 persons indicated that it's taking them maybe about 12 years to
- 8 impact the culture. And so that is something that we're always
- 9 working on.
- 10 MR. McFARLIN: Thank you. And one last question if I
- 11 may. Obviously, not all risks result in an accident or injury.
- 12 In your performance measures, do you track or measure in some
- 13 regard risks along the lines of system or equipment failures and
- 14 do analysis and follow up?
- 15 CHIEF TABORN: Yes, that is part of the information that
- 16 would be reported into the hazardous identification risk
- 17 management matrix, and so whether that be doors opening on the
- 18 wrong side of the platform or things of that nature, all of that
- 19 information is populated in. We reach out to that respective
- 20 department and find out what is the cause of that.
- 21 That, too, is one of those items that's reported to the
- 22 Tri-State Oversight Committee. And so doing their due diligence,
- 23 looking at those types of trends, and so if we don't catch it,
- 24 more often than not, the Tri-State Oversight Committee will say,
- 25 I've seen these reports, these consistent reports; what are you

- 1 doing about that? And so it is a learning process that as we look
- 2 to analyze the information, we are becoming better in identifying
- 3 future problems that we may be faced with.
- 4 MR. McFARLIN: Thank you.
- 5 CHAIRMAN SUMWALT: Thank you, Mr. McFarlin. And now the
- 6 FTA?
- 7 MR. FLANIGON: Thank you. Good afternoon, everyone. I
- 8 have a couple of questions. I'd like to start with Mr. Benjamin.
- 9 You were asked a question about the federal
- 10 representatives on the WMATA board, and whether the FTA was
- 11 represented as one of those representatives. Could you explain or
- 12 clarify who in the Federal Government, if you know, makes the
- 13 determination who the federal representatives on the WMATA board
- 14 will be?
- 15 MR. BENJAMIN: Yes, sir. The administrator of the
- 16 General Services Administration makes those appointments.
- 17 MR. FLANIGON: Great. Thank you.
- Then I have a question for Mr. Kubicek. In describing
- 19 going out, looking out in the future, with the 7000 Series railcar
- 20 procurement, does WMATA plan to equip the 7000 Series railcars
- 21 with a event recorders that would meet the current standard, which
- 22 I believe -- I don't know the number, but it's the IEEE standard
- 23 for railcar event recorders?
- 24 MR. KUBICEK: Yes, we are going to be shifting to a
- 25 whole new criteria for event recorders on our fleet for this new

- 1 series that we're introducing.
- 2 MR. FLANIGON: Okay. Great. And one more question if I
- 3 might, Mr. Kubicek. In describing equipment standards, you talked
- 4 about federal requirements or I'm not sure if you said regulatory
- 5 requirements, but can you provide an example of a federal
- 6 regulatory requirement for WMATA's railcars? Or might you have
- 7 been referring to voluntary industry standards or --
- 8 MR. KUBICEK: It's more along the lines of, you know,
- 9 voluntary, you know, requirements. Whenever we do get audited,
- 10 you know, by the Federal Government, those are the areas that we
- 11 focus in on. We are afforded the opportunity, naturally, you
- 12 know, to push the envelope like we've done on the 7K, but that's
- 13 where we stand at this point in time as far as our overview.
- MR. FLANIGON: Thanks.
- And just one last question for Chief Taborn. You were
- 16 asked about the potential or possibility of conflict with having
- 17 three jurisdictions involved in a committee. Does the 659
- 18 regulation address multistate operations and the requirements for
- 19 coordination should there be more than one state involved in
- 20 safety oversight?
- 21 CHIEF TABORN: Yeah, I think it does speak to that, but
- 22 I think it's prescriptive and it's directed to the respective
- 23 states that are involved in that. One state can be, if chosen,
- 24 the lead state safety oversight agency in a multistate type of
- 25 configuration. So that's entirely up to those identified states.

- 1 MR. FLANIGON: Okay. Thank you. That's all.
- 2 CHAIRMAN SUMWALT: Thank you, Mr. Flanigon.
- 3 Tri-State Oversight Committee?
- 4 MR. MADISON: Yes, sir. We have no questions at this
- 5 time.
- 6 CHAIRMAN SUMWALT: Thank you. WMATA, you have witnesses
- 7 here, so I'm going to give you the choice, you can go in turn or
- 8 you can go at the end?
- 9 UNIDENTIFIED SPEAKER: We have no questions at this
- 10 time.
- 11 CHAIRMAN SUMWALT: Thank you. ATU? I'm sorry.
- 12 Actually, it's Washington, D.C. Fire and EMS Department will be
- 13 next.
- 14 CHIEF SCHULTZ: Thank you, Chairman. I guess my
- 15 question is for Chief Taborn. If you could just help me
- 16 understand, and you may have explained this already and I missed
- 17 it. The chief safety officer notifies a program that there's been
- 18 a safety violation reported or certainly a safety concern. At the
- 19 programmatic level, how does that loop close back to you so you
- 20 know that it's been mitigated?
- 21 CHIEF TABORN: Okay. What we are required, whether it's
- 22 an internal safety audit or an audit that's conducted by the Tri-
- 23 State Oversight Committee, is when we identify a deficiency, we
- 24 have to prepare a corrective action. That corrective action plan
- 25 identifies what the problem was, what other mitigating things that

- 1 will rectify that and what time frame will that be done and who's
- 2 responsible for that. And so that is how we connect the groups
- 3 together, and we provide that to the Oversight Committee.
- 4 CHIEF SCHULTZ: Okay. Thank you. Last question, there
- 5 was a statement that the safety officer does have the authority to
- 6 stop immediate actions. Is there some criteria or specific
- 7 examples of when that would be appropriate?
- 8 CHIEF TABORN: I think if there's a recognized safety
- 9 violation, it should be incumbent upon not just the safety
- 10 officer, but any employee to bring that to the attention of his
- 11 fellow employee or her fellow employee and stop that activity. So
- 12 I would not want to say that we rely on one person, the safety
- 13 officer, to implement that. It is every employee when they
- 14 recognize something that is not completely safe, to bring it to
- 15 the attention, and they should have the permission from operations
- 16 or any other department to cease that activity.
- 17 CHIEF SCHULTZ: Okay. Thank you.
- 18 CHAIRMAN SUMWALT: Thank you, Chief Schultz. Ms. Jeter
- 19 from the Amalgamated Transit Union?
- MS. JETER: Thank you. I'd like to ask Mr. Benjamin a
- 21 couple of questions first. What responsibility does the Metro
- 22 board have to secure the safety of the riding public and its
- 23 workers? What specifically?
- 24 MR. BENJAMIN: Our responsibility is to all the people
- 25 of this region, to make sure that the service that we provide is

- 1 safe for the riders, is safe for our employees, and is safe for
- 2 other people in this region.
- MS. JETER: Okay. With that, does the board follow up
- 4 with engineers directly involved in those safety issues or
- 5 accidents?
- 6 MR. BENJAMIN: As I stated previously, our job is to
- 7 require that of the general manager, to establish that as his goal
- 8 and to have him report to us how well he's doing and then, if
- 9 necessary, look further, but we generally rely upon the general
- 10 manager to have appropriate staff to answer any issues.
- 11 MS. JETER: I understand your answering it in a global
- 12 sense, and I quess what I'm looking for is more specifically.
- 13 What does the board do to follow up specifically? Do you call
- 14 meetings afterwards? Is there a certain period of time that the
- 15 general manager is given and after that period of time has passed,
- 16 do you follow up by calling him back in for that particular
- 17 incident?
- MR. BENJAMIN: Are you talking about what happens after
- 19 an incident? I'm not quite sure where your question --
- 20 MS. JETER: An accident or an incident.
- MR. BENJAMIN: If there's an accident or an incident,
- 22 we're almost always informed, almost immediately, and we then hear
- 23 reports both by conference call and by meetings, public and
- 24 executive session, and we hear what is being done about that.
- MS. JETER: Okay. If there is a safety issue that

- 1 arises from reducing manpower of certain work crews on the right-
- 2 of-way, would the board ask that question of the general manager?
- MR. BENJAMIN: Well, first of all, we'd have to be made
- 4 aware that that was an issue. But if we were made aware that that
- 5 was an issue and the general manager was not dealing with it, and
- 6 there was a true belief that that was a significant problem, we
- 7 would ask him that question.
- 8 MS. JETER: Okay. Does the board request or follow up
- 9 on recommendations by federal agencies such as the FTA, TOC, any
- 10 other transit agency as to monitor the effectiveness of possible
- 11 policies and procedures?
- 12 MR. BENJAMIN: Again, as I said previously, one of the
- 13 things we do is we get reports by exception in case we are in a
- 14 situation where we are not complying with any of those directives,
- 15 and we rely upon our staff, which is the general manager and the
- 16 people who report to him, to let us know there is an area where we
- 17 are not in compliance.
- 18 MS. JETER: Earlier you said that we could no longer
- 19 continue business as usual, we had to change the way that we did
- 20 things. So in lieu of your saying that, I go back to my question
- 21 of what procedures or policies has the board put in place to make
- 22 sure that they follow up on incidents and accidents that are
- 23 occurring?
- MR. BENJAMIN: You're presuming that that's the best way
- 25 to change a culture. I think the best way to change a culture is

- 1 from the bottom up, working with every individual so that the life
- 2 of the agency is safety, that our concerns are safety, that what
- 3 we do focuses on safety. If it gets to the point that what you're
- 4 looking for is the board to create safety by reviewing reports,
- 5 you've missed the point. This has got to be an inherent part of
- 6 the entire agency and its culture.
- 7 MS. JETER: Okay. This goes to, I guess, Chief Taborn
- 8 or Mr. Kubicek. Has the staffing of work crews been reduced that
- 9 would affect the safety on the right-of-way?
- 10 MR. KUBICEK: The staffing levels as far as them being
- 11 reduced have been consistent on the work crews out there. We have
- 12 seen some reductions in our workforce but not anything that was of
- 13 field positions.
- 14 MS. JETER: Okay. Do you know of a situation where a
- 15 work crew or supervisor shut down a work area before preparing for
- 16 revenue service? Do you know of a situation where a work crew has
- 17 shut down the work area because it would not be ready for revenue
- 18 service?
- 19 MR. KUBICEK: Yes.
- 20 MS. JETER: Can you expound on that, please?
- MR. KUBICEK: Say, for instance, we had an area where
- 22 they were replacing a piece of track or if they found a defect,
- 23 that crew there could shut down that area, so that way we could
- 24 not operate through there until the effective repairs were made.
- MS. JETER: Is there -- I guess I'm looking for a

- 1 specific location where that occurred.
- MR. KUBICEK: Say, for instance, whenever we have
- 3 cracked rail reports, you know, we do have those incidents on any
- 4 one of the alignments.
- 5 MS. JETER: Okay.
- 6 MR. KUBICEK: That's not something that is uncommon or
- 7 unforeseen. But if we were out there doing inspections, you know,
- 8 with our respective staff and they found a piece of cracked rail,
- 9 we would effectively, you know, stop the operations in that area
- 10 until we were able to make the necessary repairs.
- 11 MS. JETER: Okay. Do you train employees and personnel
- 12 on how to shut down those work areas?
- MR. KUBICEK: Specifically, the employees work, you
- 14 know, as a respective team. They find a defect. They start their
- 15 radio communications and then they're also brought in supervision
- 16 support, as well as they also alert the control center at the time
- 17 of the findings.
- MS. JETER: Okay. Does Metro present or share any found
- 19 information in accidents with their employees? Not policies.
- 20 It's easy to write NTOs. I'm talking about, do you go back in
- 21 with the workforce and actually talk about accidents that have
- 22 occurred?
- 23 MR. KUBICEK: Yes, we have. We have followed up. As
- 24 you know, we've actually had some stand down meetings, you know,
- 25 talking about particular incidents. We've also gotten feedback

- 1 from employees on some of the procedures that definitely needed to
- 2 be changed from their perspective since they're the ones that are
- 3 actually out there doing the work.
- 4 MS. JETER: Okay. Is that put in writing? Has that
- 5 been put in writing?
- 6 MR. KUBICEK: Writing to?
- 7 MS. JETER: The employees.
- 8 MR. KUBICEK: As far as the effective changes?
- 9 MS. JETER: Yes. As far as the findings and what they
- 10 should or should not do, making them aware of it and -- the
- 11 findings and also what they should or should not do.
- 12 MR. KUBICEK: In some instances, yes, I would say that
- 13 there is some form of documentation where we did change, you know,
- 14 overall written procedure. In other areas, they're still under
- 15 review.
- 16 MS. JETER: Okay. And one last for Mr. Benjamin. Does
- 17 the board have any members who have railroad transportation,
- 18 right-of-way, engineering, et cetera, exposure or experience?
- 19 MR. BENJAMIN: On a railroad per se or are you talking
- 20 about --
- MS. JETER: On the board.
- 22 MR. BENJAMIN: -- in general? No, but -- we have two
- 23 members of the board who are, in fact, engineers. Those two are
- 24 not railroad engineers but they are engineers.
- MS. JETER: What type of engineers?

- 1 MR. BENJAMIN: Well, I'm an aerospace engineer, and that
- 2 covers a whole broad range of things; and Tony Giancola is a civil
- 3 engineer, and he covers another broad range of things.
- 4 MS. JETER: Okay. Any others?
- 5 MR. BENJAMIN: I don't think anybody else on the board
- 6 is an engineer. I could be corrected on that but I don't believe
- 7 so.
- 8 MS. JETER: Do they have any other railroad
- 9 transportation or right-of-way training?
- 10 MR. BENJAMIN: I've been trained to be on the right-of-
- 11 way. I don't know whether others have.
- 12 MS. JETER: Okay. Thank you.
- 13 CHAIRMAN SUMWALT: Thank you, Ms. Jeter. Alstom
- 14 Signaling?
- 15 MR. ILLENBERG: Mr. Chairman, Alstom doesn't have any
- 16 questions at this time.
- 17 CHAIRMAN SUMWALT: Thank you, Mr. Illenberg. Ansaldo?
- MR. PASCOE: Ansaldo has no questions at this time, Mr.
- 19 Chairman.
- 20 CHAIRMAN SUMWALT: Thank you.
- 21 What we will do is we will -- I know that the Technical
- 22 Panel has questions. Before we get back into that, we will break
- 23 for lunch. It's now 12:21. We will reconvene in one hour at
- 24 1:20. We are in recess.
- 25 (Whereupon, at 12:21 p.m., a lunch recess was taken.)

| 1 | AFTERNOON SESSION |
|----|--|
| 2 | (1:21 p.m.) |
| 3 | CHAIRMAN SUMWALT: Okay. We're back in session. |
| 4 | One thing I'd like to do that I did not do is, at the |
| 5 | conclusion of the parties, before we go back to the Technical |
| 6 | Panel, are there any follow-up questions from any of the parties? |
| 7 | Yes, Ms. Jeter? |
| 8 | MS. JETER: I'd like to ask, Mr. Catoe. I know that |
| 9 | Moffat and DuPont are on the properties. What are they advising |
| 10 | WMATA on specifically in light of all the accidents? |
| 11 | MR. CATOE: Well, first, specifically let me to go with |
| 12 | DuPont. I have a regular meeting with them every month or in some |
| 13 | cases, every two weeks to go over all the details of their |
| 14 | analysis. Their take has been, again, continuous, additional |
| 15 | training, more follow-up. They made some recommendations, as well |
| 16 | as Gayland Moffat, that I meet with all the superintendents of the |
| 17 | agency, and it's about 67 of them, and discuss with them their |
| 18 | responsibility and accountability for safety, and also make |
| 19 | changes in their performance contract, so to speak, making it very |
| 20 | clear that if something happens under their leadership, that they |
| 21 | will be held accountable for it, and we've made those changes. |
| 22 | They also talked about just more being out there and |
| 23 | observing what's happening and make sure that we're instantly |
| 24 | responsive to any safety suggestions that might come in. |
| 25 | MS. JETER: My next question, and I mean no disrespect |

- 1 by asking this, but since they've been on the property, we've had
- 2 five incidents that have resulted in deaths. So how has their
- 3 suggestions profited the Authority? I guess that's the best way
- 4 to put it.
- 5 MR. CATOE: No, I understand the question, and I don't
- 6 think they would take it as disrespectful. I was answering the
- 7 question post-June 22nd.
- 8 MS. JETER: Okay.
- 9 MR. CATOE: So I need to go back in time. DuPont's
- 10 activities have primarily focused on work-related injuries versus
- 11 vehicle accidents or the type of accidents we've had since June
- 12 22nd. And while they've given me some advice, that has not been
- 13 their focus, but I've asked them to focus more.
- Gayland's focus has been on organizational structure and
- 15 reporting relationships versus -- Gayland Moffitt -- the training
- 16 department in itself. And so it has not directly, obviously,
- 17 positively impacted in any performance since June 22nd, but he has
- 18 given me recommendations on going forward.
- 19 MS. JETER: Well, with his recommendations, what
- 20 training programs or initiatives are being put into place?
- 21 MR. CATOE: One of the issues from a training
- 22 perspective is -- he did the analysis, and I mentioned it as part
- 23 of the budget process, to say you have training and not provide
- 24 additional personnel, means you really can't train your personnel,
- 25 because you have to have people to replace people while they're in

- 1 training. And so he put together a matrix of how many additional
- 2 employees basically we would have to hire in order to perform that
- 3 training, and we then assigned a monetary value to that and added
- 4 it to the budget.
- 5 MS. JETER: Okay. Based on that, does the training come
- 6 out of the budgeted money, the money that you spoke of in the
- 7 budget earlier, where it's there for training and it's going to
- 8 stay there? Is that training supposed to come out of that
- 9 budgeted money?
- 10 MR. CATOE: Yes, it's two pieces to training. One is
- 11 you have to have the monies for the people who are going to
- 12 perform the training itself and, two, you have to have resources,
- 13 X number of resources, and that's people, in order to backfill the
- 14 individuals while they're in the training class. Because if you
- 15 don't have people to backfill, you're not going to take operators
- 16 off of buses or off of rail cars. They would have to do it, you
- 17 know, on an overtime basis, which again gets into a different
- 18 factor. So the monies that we have placed in the budget is to
- 19 hire additional people to backfill them. There were already
- 20 dollars to do some of the training and have people come in and to
- 21 assist us with that.
- MS. JETER: So that's still in the --
- 23 MR. CATOE: Yes, that's in the proposed upcoming budget.
- MS. JETER: Okay. One last question.
- Mr. Kubicek, you said that there is a series of cars

- 1 that have event recorders, and that's the series of -- what series
- 2 of cars?
- 3 MR. KUBICEK: The series of railcars that have the event
- 4 recorders would be the 6000s, the 5000s, the 2000s and the 3000s.
- 5 MS. JETER: Okay. And the accident, they were all
- 6 1000s. So what process does the Authority go through when there's
- 7 an accident in a train that does not have an event record?
- 8 MR. KUBICEK: What we would do is we would look to see
- 9 if there was a different railcar in the mix that was operating, as
- 10 well as we would go through any potential information, say, for
- 11 instance, from the braking or the propulsion system if they had an
- 12 intelligence, as well as we would look at the wayside information
- 13 as well.
- 14 MS. JETER: Out of the investigation and all the
- 15 incidents that have occurred, has there been any specific training
- 16 that has been implemented?
- 17 MR. KUBICEK: Can you be more specific?
- MS. JETER: Well, since June 22nd, we've had probably
- 19 four accidents that have occurred. Is there specific initiatives
- 20 that the Authority has taken with implementing certain types of
- 21 training that train employees on how to deal with these types of
- 22 incidents, whether there is right-of-way training, more initiative
- 23 where right-of-way training is concerned, whether or not there's
- 24 been a comprehensive program for refresher training or signal
- 25 training or -- I'm using a broad spectrum, but I'm trying to --

1 MR. KUBICEK: Okay. I can say what has happened is that

- 2 as we've had these incidents, as you're aware, we have had
- 3 employee-level meetings, you yourself being there along with your
- 4 staff and myself, all various stages, all times of day, weekends,
- 5 everything, to start meeting with our staff. I think you're also
- 6 aware that we've had the opportunity to meet together where we've
- 7 established some initiatives where we're going to be looking at
- 8 new procedures, new work practices that we want to start piloting,
- 9 to start looking at how we're going to change our business model
- 10 moving forward. So I do think that that's going to involve a lot
- of our employees as well as your leadership and a lot of other
- 12 folks as well.
- I do think that there's also been initiative training,
- 14 you know, with safety briefings, you know, with our focusing on
- 15 that, making sure that our staff are communicating to constantly
- 16 try to improve that process, as well as we've had like a global
- 17 outreach where we're having a big safety response initiative
- 18 that's being conducted for all of our employees. So there are
- 19 various layers of efforts underway all in parallel.
- 20 MS. JETER: So any specific classroom training?
- 21 CHIEF TABORN: If I might add, January 11th through the
- 22 13th, we held our right-of-way safety workshop in which the Union
- 23 was a participant as well as the Tri-State Oversight Committee,
- 24 the Federal Transit Administration. We've invited people from the
- 25 Bay Area Rapid Transit, from Philadelphia System. We also had

- 1 representatives from MTA New York City as well as MTA Maryland,
- 2 and we discussed a whole series of rules and regulations and what
- 3 was applicable to those respective transit systems. We had
- 4 departmental participation from a variety of people who work in
- 5 operations.
- 6 Yesterday, we had a follow-on to that with the Federal
- 7 Railroad Administration along with FTA to look at 214, the
- 8 regulation that's applicable to the Federal Railroad
- 9 Administration, with an idea that we could incorporate some of
- 10 that into our road worker safety protection program.
- 11 We will have additional follow-on training classes that
- 12 we will invite the Union back again as well as the oversight
- 13 committees, to come to a better understanding of what it is that
- 14 we can actually provide to our road workers in the right-of-way.
- MS. JETER: But there has been no specific training to
- 16 the employees. I know that I have been on those meetings, and I
- 17 understand that, but I'm talking about the individuals that do the
- 18 work, that operate the trains, that work on the right-of-way, that
- 19 work on the signals, that work on the components of the railroad,
- 20 has there been any training?
- 21 CHIEF TABORN: We are currently in conversations now
- 22 with the Transportation Safety Institute out of Oklahoma City, as
- 23 well as the National Transit Institute, to come in and provide
- 24 training initially to the 3,000 plus frontline employees as well
- 25 as supervisors throughout our system. Hopefully, that will be in

- 1 place within the next 45 days.
- 2 Again, the Federal Transit Administration funds the
- 3 Transportation Safety Institute; however, the payment of that
- 4 training will be provided by the Washington Metropolitan Area
- 5 Transit Authority as well as the payment for that training to the
- 6 National Transit Institute out of Rutgers.
- 7 MS. JETER: Thank you.
- 8 CHAIRMAN SUMWALT: Thank you, Ms. Jeter.
- 9 Any other follow-up questions from any of the parties at
- 10 this time?
- 11 Okay. Seeing none, we will go back to the Technical
- 12 Panel, and Mr. Klejst.
- MR. KLEJST: Thank you, Mr. Chairman. Good afternoon.
- 14 Mr. Catoe, is safety an element of WMATA's performance appraisal
- 15 system for management staff?
- 16 MR. CATOE: Yes, it is. Beginning with me, I receive
- 17 goals and objectives from the board of directors on an annualized
- 18 basis and the number one area that I'm reviewed on is safety. My
- 19 direct reports are also reviewed on safety, and there are specific
- 20 goals and objectives that they have, and as I mentioned earlier, I
- 21 have not seen the performance plans of every employee, but I had a
- 22 meeting with all 67 of our operational managers, making it clear
- 23 what their responsibilities and accountabilities are. I met
- 24 directly with them. So I know that they have it as part of it
- 25 and, in fact, recently, there was some denial taken. A few of

- 1 those individuals did not reach a level of performance that I
- 2 deemed that was appropriate, and they were withheld pay increases.
- 3 Others received other forms of corrective action.
- 4 MR. KLEJST: And how long has that process been in
- 5 place?
- 6 MR. CATOE: I can only speak for myself and my direct
- 7 reports. The process of safety being one of the goals and what
- 8 I'm rated on from a performance standpoint, it's been in place
- 9 within a few months after I arrived at the agency.
- 10 MR. KLEJST: And again that time frame was -- you
- 11 started with the agency when?
- MR. CATOE: January of '07, and I believe it was -- my
- 13 first performance plan was in June of '07.
- 14 MR. KLEJST: And you're not sure if that requirement is
- in everyone's performance appraisals below your level?
- 16 MR. CATOE: I do not want to make a statement that I
- 17 really can't verify. I believe that it is, but I cannot
- 18 absolutely tell you that back at that point in time.
- 19 MR. KLEJST: Okay. Thank you.
- 20 Mr. Kubicek, when you were the chief mechanical officer,
- 21 were each of your direct reports related separately, with safety
- 22 as being one element of that performance assessment system?
- 23 MR. KUBICEK: Yes, there was a component related to
- 24 safety.
- MR. KLEJST: And how long do you recall that element

- 1 being in place in the performance appraisal system?
- MR. KUBICEK: Since my arrival. I guess you would start
- 3 with the new calendar year, would be towards the end of 2007,
- 4 whenever that started getting integrated.
- 5 MR. KLEJST: Okay. Thank you.
- 6 Chief Taborn, the safety department, you described the
- 7 involvement of that group as far as its function providing safety
- 8 oversight. Is that oversight function throughout WMATA done with
- 9 internal staff only or do you use the services of an outside
- 10 contractor?
- 11 CHIEF TABORN: Internal but we have had occasions that I
- 12 understand that we reached out to APTA to assist in conducting
- 13 those internal safety audits.
- MR. KLEJST: That was APTA?
- 15 CHIEF TABORN: Yes.
- 16 MR. KLEJST: Is that part of the triennial audit process
- 17 required by Part 659 or would that be a separate audit that you
- 18 had --
- 19 CHIEF TABORN: It was part of that process. I think
- 20 we're moving now to have more of an independent, internal
- 21 opportunity to look at some of those same internal safety audits,
- 22 and we'll go through those 21 in a series of 3 years. But in the
- 23 past, if I'm not mistaken, and as recently as December of 2009,
- 24 APTA participated in the review of at least seven of those
- 25 internal components.

1 MR. KLEJST: And, Mr. Kubicek, in your current capacity,

- 2 do you use the services of an outside contractor to provide any
- 3 type of inspection, oversight, audits or do you rely strictly on
- 4 the internal WMATA staff?
- 5 MR. KUBICEK: As the chief had previously mentioned,
- 6 like, we're talking about the National Transportation Institute
- 7 and some of these other entities, that's me supporting him as well
- 8 to start bringing in some other entities to start, you know, help
- 9 standardizing our information, give us a different perspective on
- 10 what we're trying to work through and try to be able to touch as
- 11 many people as we possibly can to get through this.
- MR. KLEJST: And that would be prior to the June 22,
- 13 2009 incident or would that be post-incident?
- MR. KUBICEK: Post.
- 15 MR. KLEJST: Post. Prior to June 22 of 2009, were there
- 16 any outside providers, outside contractors used to provide those
- 17 types of services? Either Mr. Kubicek or Chief Taborn.
- 18 CHIEF TABORN: The working relationship with the Federal
- 19 Transit Administration affords us the opportunity to take
- 20 advantage of some of those courses that the sponsor, the
- 21 Transportation Safety Institute, rolls out. And periodically we
- 22 have them on the premises to go over a variety of safety-related
- 23 courses, and it's pretty much well attended. And we also extend
- 24 the offer to other transit agencies that may very well be in the
- 25 area, and that's been going on for many years.

- 1 MR. KLEJST: And I understand the courses that are
- 2 offered for internal development, but as far as the use of outside
- 3 contractors to provide audit and inspection functions, I'm still
- 4 not clear as to whether or not --
- 5 CHIEF TABORN: I think the only outside entity that
- 6 participated in that, if I'm not mistaken, based upon my knowledge
- 7 is APTA.
- 8 MR. KLEJST: As part of that triennial audit function?
- 9 CHIEF TABORN: Yes.
- 10 MR. KLEJST: Okay. Thank you.
- 11 Mr. Kubicek, you mentioned that your staff within
- 12 operations, the Rail Transit Delivery and the Transit
- 13 Infrastructure and Engineering Services group, has responsibility
- 14 for inspection and oversight; is that correct?
- 15 MR. KUBICEK: Yes, sir.
- 16 MR. KLEJST: Roughly how many, on a daily basis, weekly
- 17 basis, quarterly basis, of these audits or inspections are
- 18 performed by staff within that particular group?
- MR. KUBICEK: In a specific area?
- 20 MR. KLEJST: Well, the staff that comprises Rail Transit
- 21 Delivery or the Transit Infrastructure and Engineering Service
- 22 group, the body of professional staff, managers and supervisors
- 23 that you stated earlier provided these internal oversight and
- 24 audit functions, roughly how many of these inspections, audits,
- observations, take place throughout a week, throughout a month?

- 1 If you could let me know an estimate as to how many take place?
- MR. KUBICEK: Say, for instance, internally looking at
- 3 the rail transportation component, there are several hundred that
- 4 are conducted, you know, on a weekly basis, and that number again
- 5 was probably a little bit higher than that than, say, for instance
- 6 our Quality Control group. They could range anywhere from 20
- 7 major audits up towards 100, you know, depending upon their
- 8 workload and what they're addressing.
- 9 MR. KLEJST: Separate and apart from the QA/QC function
- 10 and the services that they provide, supervisors, foremen,
- 11 managers, depending on the level that they're at, how many of
- 12 those individuals perform inspections and roughly how many of
- 13 those inspections do they perform?
- MR. KUBICEK: If you're getting into, say, for instance,
- 15 like the rail transportation component, every supervisor is held
- 16 accountable to perform X amount of inspections. It's going to be
- 17 in the hundreds that we have a total count that's completed on a
- 18 weekly basis, and it'll even be higher -- I don't have the exact
- 19 numbers in front of me, but we do have trending reports, you know,
- 20 from the database.
- MR. KLEJST: So roughly 100 per week, within that area?
- 22 MR. KUBICEK: I would say more than that.
- MR. KLEJST: More than 100?
- MR. KUBICEK: Easily.
- MR. KLEJST: And who looks at those reports?

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- 1 MR. KUBICEK: That would be reviewed by the chief
- 2 operations supervisors. You'd have individuals in the management
- 3 ranks of the, you know, Transportation Department. We get a
- 4 summary of information on that. We also utilize some of that
- 5 information --- we have, like, a weekly newsletter that if we see
- 6 some items, that's released to all of our operators in the field.
- 7 That was a collection process. We're starting to get this
- 8 information to our frontline employees.
- 9 MR. KLEJST: And that's starting to. Let me ask you the
- 10 question. Prior to the June 22nd incident, of 2009, what level of
- 11 review did the management, say, the chain of command within your
- 12 organization, take with respect to the review of those reports?
- MR. KUBICEK: We had reviews ongoing, you know, prior to
- 14 the incident. As far as going out, you know, to the employees on
- 15 a broad scale basis, I know it's an approximate time frame, you
- 16 know, of last year. Again, it wasn't something that was done on a
- 17 regular basis, so I don't want to get my time frames, you know,
- 18 mixed up. But I do know that it's something that we're pushing
- 19 out to communicate to say that we've found a trend that is a
- 20 concern on our part and we need your assistance, and it's just
- 21 information, you know, for them.
- MR. KLEJST: Okay. A year ago, for example, as a point
- 23 in time --
- MR. KUBICEK: Yeah.
- MR. KLEJST: -- the management team that you have within

- 1 your organization as the chief mechanical officer, that's made up
- 2 of roughly how any people?
- 3 MR. KUBICEK: As far as direct reports?
- 4 MR. KLEJST: Direct reports and the individuals that
- 5 form the supervisory chain of command down to the frontline level.
- 6 MR. KUBICEK: Frontline level, you're probably looking
- 7 in excess of 300 employees.
- 8 MR. KLEJST: 300 employees from supervisor up through
- 9 the ranks of the chief mechanical officer; is that correct?
- 10 MR. KUBICEK: Just specifically the chief mechanical
- 11 officer?
- 12 MR. KLEJST: Yes.
- 13 MR. KUBICEK: Then the numbers would probably be a
- 14 little bit less. You're probably looking at over 100.
- MR. KLEJST: And of those 100 people, how many of those
- 16 actually perform those audits, inspections and observations that
- 17 would document those items?
- MR. KUBICEK: All different frontline supervisors would
- 19 be, you know, responsible for, you know, performing those
- 20 inspections. Then that would cascade up through the management
- 21 ranks.
- 22 MR. KLEJST: So we said before it was roughly 100 per
- 23 week within, say, the mechanical officer function?
- 24 MR. KUBICEK: Okay. What I was talking about earlier,
- 25 again, was rail transportation, and now you're asking me questions

- 1 about the chief mechanical officer and dealing with railcar
- 2 maintenance. So that's where there's a different set of numbers
- 3 on my part.
- 4 MR. KLEJST: Well, that's what I'm trying to understand.
- 5 Since you performed the services of a chief mechanical officer for
- 6 a period of time at WMATA --
- 7 MR. KUBICEK: Yeah.
- 8 MR. KLEJST: -- and you had an organization in place
- 9 from your level through the frontline supervisory level --
- 10 MR. KUBICEK: Yeah.
- 11 MR. KLEJST: -- you're telling me that there were
- 12 observations being made. I'm just trying to capture the order of
- 13 magnitude as to how many of those observations, compliance audits,
- 14 if you like to call them that, various inspections or audits,
- 15 roughly how many took place just within that mechanical function
- 16 with you being responsible as the chief mechanical officer for?
- MR. KUBICEK: Okay. Well, there would be easily in
- 18 excess of 100 because our supervisors, say, for instance, when
- 19 you're talking about the mechanical ring, they're held accountable
- 20 to close out, you know, work orders and such. And so part of that
- 21 work order review process is to make sure that everything is in
- 22 order and also, whenever you're releasing equipment as well.
- 23 MR. KLEJST: So you're including that 100 overall
- 24 inspections of equipment to ensure that they're in compliance with
- 25 the standards at WMATA?

- 1 MR. KUBICEK: Yes, all functions.
- 2 MR. KLEJST: Not just observations of individual safety
- 3 performance.
- 4 MR. KUBICEK: We do have specific safety items. Are you
- 5 looking at an audit or are you looking at observations?
- 6 MR. KLEJST: Well, depending upon the terminology used.
- 7 That's why I'm being as broad based as this. If you could help
- 8 clarify that, that would certainly help here, but in the railroad
- 9 industry there are compliance audits that are required by federal
- 10 regulation.
- MR. KUBICEK: Uh-huh.
- MR. KLEJST: And supervisors by internal procedures have
- 13 requirements to perform those observations. What I'm trying to do
- 14 here is determine if a similar observation, audit, inspection,
- 15 compliance process is in place at WMATA, and if so, how does it
- 16 work from the point where an observation is made to the point
- 17 where you as the chief mechanical officer would receive feedback
- 18 on the outcome of those observations that there was an area, for
- 19 example, of noncompliance?
- 20 MR. KUBICEK: Okay. I'll start with the mechanical
- 21 side, strictly as far as, you know, the repair of equipment and
- 22 working of that, you know, part of our process, is that the
- 23 individuals from a supervisor on up are held accountable to close
- 24 out work orders and make observations. Whenever DuPont was
- 25 introduced here, we do have what we call like safety conversations

- 1 or safety observations that we're held accountable to perform X
- 2 amount on a certainly monthly basis.
- 3 MR. KLEJST: When was DuPont introduced into the WMATA
- 4 organization? Mr. Catoe can answer that or Mr. Kubicek, whoever
- 5 is qualified to.
- 6 MR. CATOE: Approximately I believe I took that to the
- 7 board in March, April of 2007. So they came on board sometime in
- 8 mid 2007.
- 9 MR. KLEJST: Now, Mr. Kubicek, if there are roughly 100
- 10 of these observations, inspections, audits that take place during
- 11 a given week within the mechanical organization, what's the
- 12 mechanism in place for the non-compliant results to be brought
- 13 forward to whatever level you've determined or WMATA has
- 14 determined it should be?
- 15 MR. KUBICEK: Well, that would rest with the frontline
- 16 management. It would rest with the shop management officials. We
- 17 also have an engineering department that they would be working on
- 18 to resolve these issues, be it mechanical, electrical or
- 19 electronic. Then we also have information where we're evaluating
- 20 our overall performance of our, you know, railcars. I mean, this
- 21 is between failures. That criteria is also utilized to monitor
- 22 and observe the performance of our equipment.
- 23 MR. KLEJST: Now, when you were in your position as
- 24 chief mechanical officer, did you have periodic staff meetings
- 25 with your direct reports?

- 1 MR. KUBICEK: Yes.
- MR. KLEJST: And how was safety addressed at those staff
- 3 meetings?
- 4 MR. KUBICEK: Whenever we were having the meetings
- 5 directly with the mechanical individuals, it was basically we were
- 6 looking at any particular item that posed a major safety, you
- 7 know, threat to the integrity of the fleets. That continues. Our
- 8 conversation would be looking at things from a very technical
- 9 perspective to say, okay, we're seeing, say, for instance, a
- 10 failure on a traction motor. We would start evaluating with our
- 11 engineering and our staff to say, okay, whenever this failure
- 12 occurs, what is the risk that we see that could potentially take
- 13 place? So that information was discussed on a monthly basis.
- 14 MR. KLEJST: This was a standing item on your agenda or
- 15 was it discussed only if there were safety-related issues?
- 16 MR. KUBICEK: It's a regular conducted meeting where
- 17 you're looking at the overall performance of your equipment and
- 18 you're starting to dissect down to try to understand what type of
- 19 failures are out there.
- MR. KLEJST: So if there were observations made by
- 21 frontline supervisors of employees, for example, failing to wear
- 22 the appropriate personal protective equipment, and it happened two
- 23 or three times a week, is that generally something that would be
- 24 discussed at this staff meeting or would that be left up to lower
- 25 level staff to handle?

1 MR. KUBICEK: Say, for instance, if we were hearing from

- 2 all of the respective shops -- that's the other thing is,
- 3 logistically, you have a large organization. So you cover
- 4 multiple areas, multiple disciplines. So you have to have input
- 5 from all these different shops. We did, for example, like in the
- 6 use of safety vests, as we went from a Class 2 vest to a Class 3
- 7 vest, one of the things immediately that we got feedback from
- 8 staff was that there was concern in wearing the apparel because,
- 9 you know, of its size or the ability for it to get snagged. And
- 10 so, you know, with that being prompted, that's initiated a whole
- 11 other set of reviews and investigations on our part as we continue
- 12 to work through these issues.
- 13 MR. KLEJST: And that would be a topic that would be
- 14 discussed at your level?
- MR. KUBICEK: Absolutely.
- 16 MR. KLEJST: Okay. And if there was an issue with
- 17 respect to excessive wheel wear on either certain series of
- 18 equipment or equipment operated on certain lines, how would that
- 19 be brought up to the level, either yourself or would it be brought
- 20 up to the general manager?
- 21 MR. KUBICEK: As far as excessive wheel wear?
- 22 MR. KLEJST: If you were experiencing conditions through
- 23 your frontline supervisory staff that certain car series or cars
- 24 operated on a certain line was experiencing a greater than normal
- 25 wheel wear, would that be brought up to your level and is that

- 1 something that you would normally share with the general manager
- 2 since excessive wheel wear out of standard could result in a
- 3 derailment?
- 4 MR. KUBICEK: Yes, if there was an issue, say, for
- 5 instance, that we sampled information and then we continued to
- 6 review it and then we saw that it was a growing issue towards we
- 7 were going to see, you know, like a fleet defect, that would be
- 8 something that we would naturally, you know, elevate above me.
- 9 But if it was something where it was a particular isolated case or
- 10 if it maybe was a particular, you know, installation, we would not
- 11 alert that at that point in time.
- MR. KLEJST: Alert to whom?
- 13 MR. KUBICEK: Up to the general manager level.
- 14 MR. KLEJST: Okay. What's the mechanism for collecting
- 15 and categorizing and classifying that information or information
- 16 similar to that?
- 17 MR. KUBICEK: We have a maintenance management database,
- 18 you know, product that's electronic. That's one of the things
- 19 that we're working on, continue to mature. You try to get your
- 20 staff to put in as much information into these electronic
- 21 databases so that way you can start extracting information and
- 22 start, you know, developing trends. That's the first process.
- 23 Then the next phase would be looking at this on a
- 24 monthly basis, start breaking down your respective categories, you
- 25 know, wheel sets, traction motors, propulsion braking. That goes

- 1 through a series of reviews, you know, by staff and then the
- 2 process continues.
- 3 MR. KLEJST: And when was that process introduced into
- 4 WMATA?
- 5 MR. KUBICEK: It's been around for quite sometime,
- 6 before my arrival. Again, they reviewed things on a regular basis
- 7 and we continue to do so. I can say that, you know, the use of
- 8 our electronic maintenance database has definitely evolved over
- 9 the past several years and will continue to do so. But there was
- 10 trending information here for quite some time.
- 11 MR. KLEJST: Does the assistant general manager of
- 12 Transit, Infrastructure and Engineering Services report to you in
- 13 your current position?
- 14 MR. KUBICEK: I'm kind of having a dual role at this
- 15 time.
- 16 MR. KLEJST: Well, then that would be yes or no?
- 17 MR. KUBICEK: Yes, sir.
- 18 MR. KLEJST: Okay. Are you provided with observations
- 19 by field staff or your direct report staff of observations made of
- 20 right-of-way employees as far as being in compliance with WMATA's
- 21 special order that provides for right-of-way protection?
- MR. KUBICEK: Yes.
- 23 MR. KLEJST: And roughly how many per week are you
- 24 presented with by your staff?
- MR. KUBICEK: I, generally at my level, get like a

- 1 monthly report.
- 2 MR. KLEJST: Okay. And how many observations would
- 3 appear in that monthly report?
- 4 MR. KUBICEK: Observations, it could range 20 to 100.
- 5 MR. KLEJST: Specifically dealing with observation of
- 6 employees being in compliance or noncompliance with the special
- 7 order dealing with right-of-way protection?
- 8 MR. KUBICEK: Yes.
- 9 MR. KLEJST: And how long have you been in the current
- 10 position that you have the TSSM group reporting to you?
- MR. KUBICEK: The TSSM group, they started reporting to
- 12 me in approximately November of 2007.
- 13 MR. KLEJST: And of the 20 to 100 that you routinely
- 14 receive, would you be able to provide an estimate as to how many
- 15 of those observations were presented to you where the employee was
- 16 in noncompliance?
- MR. KUBICEK: Not directly off the top of my head.
- 18 MR. KLEJST: Chief Taborn, is WMATA's Metrorail
- 19 operation governed by any federal standard other than those found
- 20 in the Drug and Alcohol Regulation or the State Safety Oversight
- 21 Regulation?
- 22 CHIEF TABORN: I know those are two federal regulations
- 23 that are applicable to transit agencies, in particular, the 659
- 24 for those rail operations, and the Drug and Alcohol. I can't
- 25 necessarily speak to any other federal regulations that we have to

- 1 respond to.
- 2 MR. KLEJST: Now, there were questions asked previously
- 3 with regard to standards at WMATA and the response was similar to
- 4 OEM standards dictate what those standards are. Is that the only
- 5 basis for which WMATA has for developing standards or are there
- 6 other standards or is there another basis for those standards that
- 7 would govern inspection, maintenance procedures for right-of-way,
- 8 track and signal and train control, the equipment inspection
- 9 standards? If you could just explain that for us, please.
- 10 CHIEF TABORN: I think most transit agencies adhere to
- 11 some of the recommended standards from the APTA. They also adhere
- 12 to some of the recommendations that are found in 659. I can say
- 13 that based upon audits that were conducted from the Tri-State
- 14 Oversight Committee, in response to Dave's comments on how we
- 15 capture information and how we share information, that has been an
- 16 observation that reflects that we don't do it as well we should do
- 17 it, and so I just wanted to put on the record that that in fact
- 18 states that. And so we're working diligently to make sure that
- 19 all information is shared and that we can use that information to
- 20 identify trends and problems and things of that nature.
- 21 But with regards to the standards, it's those standards
- 22 that many of us -- and many of those that are in the transit
- 23 industry work with the American Public Transportation Associations
- 24 on various standards committees, for safety, security, you name
- 25 it, trains and the like.

- 1 MR. KLEJST: You mentioned APTA standards. Would you be
- 2 referring to the APTA Manual of Standards and Recommended
- 3 Practices of Rail Transit Systems?
- 4 CHIEF TABORN: At one time, that was part of the
- 5 standards that was put out to the transit industry, but I think
- 6 with the evolution of 659, most transit agencies don't necessarily
- 7 adhere to those but rather adhere to what is prescriptive in 659.
- 8 MR. KLEJST: So presently, WMATA Metrorail does not use
- 9 the APTA standards as the basis for their standards for either
- 10 right-of-way or equipment operation then; is that correct?
- 11 CHIEF TABORN: No, but we work diligently with them. In
- 12 fact, we've invited them to be a part of this right-of-way safety
- 13 program to address issues relative to right-of-way safety. And so
- 14 we look to find the best possible solution that will enhance our
- 15 right-of-way safety program and a manual that speak to right-of-
- 16 way safety.
- 17 MR. KLEJST: Well, dealing specifically with vehicle
- 18 inspection and maintenance -- I'll address this question to Mr.
- 19 Kubicek. Do you use APTA's standard for vehicle inspection and
- 20 maintenance as described in the APTA Manual of Standards and
- 21 Recommended Practices for Rail Transit Systems? Do you use that
- 22 as a standard for your operation in WMATA?
- 23 MR. KUBICEK: That is one of the quidelines that we
- 24 utilize.
- MR. KLEJST: But do you use those standards or just use

- 1 it as a quideline?
- 2 MR. KUBICEK: We use it as a guideline. The APTA
- 3 standards, whenever they were developed, you know, that process
- 4 has been underway for several years, and it'll continue on for a
- 5 long time. But whenever you start getting into specific door
- 6 systems for each respective transit authority or you start getting
- 7 into each specific brake system, you know, they are used as a
- 8 guideline. Not everybody has exactly the same equipment out
- 9 there.
- 10 MR. KLEJST: So you use the standards as a guideline
- 11 based on the unique qualities of your vehicle?
- MR. KUBICEK: Yeah, you want to make sure that, say, for
- 13 instance, from a frequency perspective, you're following, you
- 14 know, general industry trends. There is, for example, a mindset
- 15 out there that you do time-based maintenance. There's another
- 16 philosophy out there that, you know, you could possibly utilize a
- 17 mileage-based interval, you know, for your maintenance. You know,
- 18 the autonomy is given to each authority. You just have to be able
- 19 to demonstrate that you're executing which venue on a regular and
- 20 consistent basis and then through your finding, you know, you
- 21 adjust accordingly based on the condition of your asset, the age
- 22 of your asset, it's lifecycle.
- 23 MR. KLEJST: And do you use the time or the mileage
- 24 basis for determining your period maintenance on your rail
- 25 vehicles?

- 1 MR. KUBICEK: Here at WMATA we presently are using a
- 2 time-based philosophy. It's my ultimate goal to go to a mileage-
- 3 based philosophy.
- 4 MR. KLEJST: Now, as far as the inspection procedures
- 5 for right-of-way and the signal system, are these two internal
- 6 standards that you have developed or do you rely on the APTA
- 7 standards for fixed -- or signal and train -- signal and
- 8 communication inspection and maintenance to provide this standard?
- 9 MR. KUBICEK: You would use all available materials.
- 10 You would use, you know, APTA reference material, other railroad
- 11 authorities, to see what they're doing in their respective area,
- 12 but you do have to start working towards kind of tailoring it to
- 13 your respective environment.
- 14 MR. KLEJST: So what do you do though at WMATA as far as
- 15 the procedures that have been developed for signal and train
- 16 control and equipment?
- 17 MR. KUBICEK: For train control?
- 18 MR. KLEJST: Signal and communication and train control.
- 19 MR. KUBICEK: Right now, the process would be working
- 20 off of the OEM recommendation, original equipment manufacturer
- 21 recommendations, and as we start shifting towards the age of our
- 22 equipment and our duty cycle, you know, we have to continue to
- 23 enhance our maintenance protocol.
- MR. KLEJST: Do you use any of the standards that have
- 25 been advanced by any of the other organizations such as the

- 1 American Society of Mechanical Engineers?
- MR. KUBICEK: We do get, you know, information from them
- 3 on that. Like IEEE is out there as well. The biggest thing is
- 4 focusing on getting your program standardized, getting the program
- 5 into more of an electronic database environment. As you know, we
- 6 have a lot of functions that are still done in more of a paper
- 7 function, and that's been a big transition of this agency, to go
- 8 from a paper environment to a paperless environment. But we would
- 9 use the Federal Railroad Administration. We would look at what
- 10 other manufacturers or other vendors might have to offer us as
- 11 well.
- MR. KLEJST: So in the absence of a defined standard for
- 13 the rail transit industry promulgated by the Federal Transit
- 14 Administration, do you use the Federal Railroad Administration's
- 15 standards for track safety?
- 16 MR. KUBICEK: We do reference them. We do use them as a
- 17 minimum guideline but there are some differences between a Class I
- 18 or Heavy I railroad versus a transportation environment, be it
- 19 light rail or subway.
- 20 MR. KLEJST: So you said you reference them and you also
- 21 said you use them a minimum standard, if I understood correctly?
- 22 MR. KUBICEK: Yes. Yes, we do use them.
- 23 MR. KLEJST: So do you meet the minimum standards
- 24 established by the Federal Railroad Administration's track
- 25 standard regulation?

- 1 MR. KUBICEK: As far as track standards? Yes.
- 2 MR. KLEJST: You do meet Part 214 standard --
- 3 MR. KUBICEK: When you talk about 214, I'm not going to
- 4 say about the right-of-way protection. When you ask track, I'm
- 5 thinking specifically about our finish -- you know, our gauging,
- 6 our inspections.
- 7 MR. KLEJST: Under Part 213 or under the track safety
- 8 standards?
- 9 MR. KUBICEK: I'm focused on track safety.
- MR. KLEJST: That are promulgated by the Federal
- 11 Railroad Administration under Title 49?
- 12 MR. KUBICEK: Yes. We use that as our reference.
- 13 MR. KLEJST: Do you also use the FRA's standards for
- 14 signal and train control inspection and maintenance as part of the
- 15 WMATA standard for similar equipment?
- 16 MR. KUBICEK: I couldn't comment on that directly. I'm
- 17 not 100 percent sure on that because our signaling systems are a
- 18 lot more complex than what you would see on some of your Class I
- 19 railroads.
- 20 MR. KLEJST: Chief Taborn, the next question falls under
- 21 the category of audits that are either conducted by WMATA staff
- 22 itself or through outside agencies, whether it be state safety
- 23 oversight -- you also mentioned the APTA audit and any other
- 24 audits that might be instituted by the Federal Transit
- 25 Administration. What is the internal process that you have to

- 1 ensure that when items are defined as in need of corrective
- 2 action, for example, declared an open item, what is the internal
- 3 process in place from the moment that open item is created to the
- 4 point where that item is closed acceptable response?
- 5 CHIEF TABORN: Okay. The identification of the
- 6 unacceptable item based upon the inspection, once that is
- 7 identified, the corrective action to mitigate that is created.
- 8 That corrective action is sent to the Tri-State Oversight
- 9 Committee that will identify that, one, there was an element that
- 10 did not meet that audit criteria and these are the measures that
- 11 we will take to close that out; these are the time frames in which
- 12 we will operate within and these are the people who will be
- 13 identified as the lead for that particular corrective action. And
- 14 that is consistent with the series of triennial audits of the
- 15 different elements within the System Safety Program Plan, whether
- 16 there are 21 elements, you know, we approach 7 per year.
- 17 MR. KLEJST: And the status of the corrective action
- 18 items, whether it be open or closed, is that a piece of
- 19 information that you routinely share with the general manager?
- 20 CHIEF TABORN: Since I've been the chief safety officer,
- 21 I will share any and everything with the general manager. Again,
- 22 that only goes back to November 23rd of last year, but we would,
- 23 in the Customer Service, Operations, Safety Committee, provide
- 24 that type of information if it's contained in our weekly or
- 25 quarterly report, we will provide that information to the general

- 1 manager as well as other board members.
- 2 MR. KLEJST: So you do provide that to board members
- 3 directly?
- 4 CHIEF TABORN: That's what I do.
- 5 MR. KLEJST: Prior to June 22 of 2009, are you aware of
- 6 the process that was in place as far as the reporting and tracking
- 7 of the open items that were identified, for example, through
- 8 triennial audits done by TOC or --
- 9 CHIEF TABORN: I don't know if, in fact, that that
- 10 information was presented to the board.
- MR. KLEJST: Okay. Thank you.
- Now, Mr. Catoe, there have been corrective action items
- open, some go as far as back as the 2004 triennial audit according
- 14 to the information that's been provided. There were 2 items from
- 15 the 2004 audit. There were 3 items listed as open from the
- 16 Eisenhower Avenue incident, and the DuPont Circle incident had 2;
- 17 Woodley Park, 11; and the Rosslyn signal failure, 2. Is this
- 18 information that you would normally share with the board of
- 19 directors?
- 20 MR. CATOE: Not in the context of the report as it is
- 21 given to me. We report to the board just monthly updates on
- 22 various information, and I'm trying to think back on the specific
- 23 dates. I don't recall a report in the last six months prior to
- 24 the June 22nd accident, and I would have to go back and look at my
- 25 records. We share so much information, I don't know if that

- 1 specific document went to the board.
- MR. KLEJST: Throughout your career as the general
- 3 manager, can you recall sharing this information at any point with
- 4 the board of directors that you have these situations that are
- 5 still maintained as being open for whatever the reason may be,
- 6 either the inability to implement because of resources, inability
- 7 to implement because of equipment, but do you keep the board
- 8 apprised of these open items that have potential safety
- 9 consequences?
- 10 MR. CATOE: Well, I took the question to mean did I
- 11 provide that document to the board of directors.
- 12 MR. KLEJST: Perhaps I could rephrase it. Do you
- 13 provide the board with an overview of the status of these items?
- 14 Do the board know that they have these many items open?
- 15 MR. CATOE: There have been times we have communicated
- 16 information to the board. Again, I don't recall the exact time
- 17 period. There's been discussions on specific items on the open
- 18 list, items that are capital intense, vehicles, outside latches
- 19 for doors, rollback protection unit, those type of issues.
- 20 MR. KLEJST: Do you think it's important for the board
- 21 to be presented with information that centers on open corrective
- 22 action items that have safety consequences that go back to 2004?
- 23 MR. CATOE: Yes. As I said, I have presented some of
- 24 those items. I really need to think through which forms or which
- 25 processes I send directly to the board. I do recall

- 1 communications but I don't want to state that I've done this
- 2 monthly as part of the safety director's, the chief safety
- 3 officer's report. We provide period information to the board, but
- 4 I do not recall giving the entire list of open items. Those items
- 5 started, I think, with over 200 open items back in '07, and I know
- 6 we did reduce that down to below 70. But there's been a recent
- 7 communications to the board, I just don't recall a systemic full
- 8 reporting to the board on every item that's open. There's been
- 9 some of the items that are open that we've reported to the board.
- 10 MR. KLEJST: Okay. Now, Mr. Benjamin, as a member of
- 11 the WMATA board of directors, do you believe this is important
- 12 information for the board of directors to know?
- MR. BENJAMIN: I think it's important for the general
- 14 manager to close out items that can be closed, and if for some
- 15 reason he cannot close them, to report that to the board.
- 16 MR. KLEJST: But you don't feel it's important for the
- 17 board to be aware of this on a periodic basis?
- MR. BENJAMIN: What's necessary here is for us to hold
- 19 the general manager responsible for doing his job and doing his
- 20 job correctly. If we were to take every area, safety, finance and
- 21 everything else, and ask for regular reports on everything that
- 22 could conceivable be behind, be wrong, be different, we would
- 23 never be able to deal with that volume of information. That's why
- 24 we're a policy board, and that's why we deal with the exceptions,
- 25 and if the general manager is hiding information from us, that

- 1 tells us something about whether we should be retaining that
- 2 general manager. If that general manager is forthcoming with the
- 3 information and says, you know, there are some of these and I'm
- 4 dealing with them, that should be sufficient.
- 5 MR. KLEJST: Okay. You brought up the situation just
- 6 now where if the general manager were hiding information, what is
- 7 the mechanism in place that you would find out if, in fact, that
- 8 general manager was hiding something?
- 9 MR. BENJAMIN: Those kinds of things do in fact
- 10 eventually get to board members. There's lots of different people
- 11 who are more than willing to let us know about things like that,
- 12 and then we would look into those issues.
- MR. KLEJST: So the answer, basically, to my first
- 14 question was you don't know; you're not presented with this
- 15 information because it's not a policy issue?
- 16 MR. BENJAMIN: We do not -- we cannot, we cannot review
- 17 every issue there is out there on a routine basis. We have to
- 18 look at things on the basis of exceptions when there are problems.
- 19 We have to presume that our general manager is honest with us, is
- 20 straightforward with us and will provide us with accurate and
- 21 meaningful information and will provide to us those policy
- 22 decisions that we need to make.
- 23 CHIEF TABORN: Mr. Klejst, if I could?
- MR. KLEJST: Yes, Chief?
- 25 CHIEF TABORN: Back in 2006 is when the corrective

- 1 actions were totaling roughly 245 to 250 items. Upon the arrival
- 2 of the general manager, we have closed over 180 plus of those
- 3 corrective actions and probably within the last 2 to 3 months, 80
- 4 of those have been closed out. And that took a concerted effort,
- 5 working with the Tri-State Oversight Committee, working with the
- 6 departments within WMATA to pay time and attention to make sure
- 7 that the answers to the questions that were raised by the Tri-
- 8 State Oversight Committee as to what it takes to close out an item
- 9 were clear, and we have the right people in place, and we
- 10 diligently closed those out. So I would just like for the record
- 11 to say there were over 180 of those 250 that happened, going back
- 12 to 2004, way before the general manager arrived.
- MR. KLEJST: Thank you.
- 14 And, Mr. Benjamin, subsequent to the June 22, 2009
- 15 accident, other than my mention today of the open items that I
- 16 described earlier, were you aware that they existed, that there
- 17 were open corrective action items that went back to 2004?
- MR. BENJAMIN: There were some by the National
- 19 Transportation Safety Board that we are aware of, and we were made
- 20 aware of the ones that were open with the Tri-State Oversight
- 21 Committee.
- MR. KLEJST: Subsequent to the June 22nd incident?
- 23 MR. BENJAMIN: Subsequent to the accident.
- 24 MR. KLEJST: All right. Thank you.
- Chief Taborn, is there any information that's developed

- 1 within WMATA as a result of inspections or audits that is not
- 2 presented to the Tri-State Oversight Committee?
- 3 CHIEF TABORN: No. Again, speaking from my time, my
- 4 tenure as the acting chief safety officer, I know what it is to
- 5 work with Tri-State Oversight agencies across the country and the
- 6 importance of what it is that they're tasked with doing to ensure
- 7 safety. I know the focus and the job that's on the shoulders of
- 8 the Federal Transit Administration and I can tell you that transit
- 9 safety representatives across the country have the same desire, to
- 10 make sure that safety is number one. So we share everything with
- 11 the Tri-State Oversight Committee. It is my function and my duty
- 12 to make sure that there's nothing that goes without sharing. And
- 13 so I can only speak from my time and to the forward.
- MR. KLEJST: Understood. Thank you.
- Now, Chief Taborn, can any entity, whether it be at the
- 16 state level, local level, federal level, assess a penalty, civil
- 17 fine, if Metrorail was found to be in noncompliance with either
- 18 internal standards or an element of the System Safety Program
- 19 Plan?
- 20 CHIEF TABORN: I think what's in place with regards to
- 21 the 659 is that the FTA can withhold up to five percent, if I'm
- 22 not mistaken, of those particular states; not the transit
- 23 agencies, but the states.
- 24 MR. KLEJST: Are you aware of a condition where that
- 25 ever happened at WMATA?

- 1 CHIEF TABORN: Not to my knowledge.
- 2 MR. KLEJST: And how often do you meet with the Tri-
- 3 State Oversight Committee to review the status of the open
- 4 corrective actions or any other issues with respect to safety?
- 5 CHIEF TABORN: Well, we've probably been meeting at
- 6 least once a week. We have what they call a capture meeting, and
- 7 that is looking at the corrective actions, bringing the right
- 8 parties together, and working diligently to close those out.
- 9 Those have been implemented probably within the last month or so,
- 10 but we're in either daily contact with representatives from TOC,
- 11 the chairman, the vice chairman or other members on a weekly
- 12 basis, and I'm speaking recently. It's like maybe two or three
- 13 times per week.
- 14 MR. KLEJST: And prior to the June 22nd accident, are
- 15 you aware of the level of communication that took place?
- 16 CHIEF TABORN: I would say at least monthly, probably
- 17 twice a month that there were communications, meetings, things of
- 18 that nature.
- 19 MR. KLEJST: Now, when the TOC issues a report on a
- 20 triennial audit or any other special audit that may take place,
- 21 are you the individual by title, chief safety officer, that
- 22 receives that or is that sent to the general manager?
- 23 CHIEF TABORN: That's sent to me.
- MR. KLEJST: And, Mr. Catoe, how are you made aware of
- 25 the results of a Tri-State Oversight Committee audit?

1 MR. CATOE: Through the chief safety officer as well as

- 2 receiving a direct copy.
- 3 MR. KLEJST: So you do receive one directly --
- 4 MR. CATOE: Yes.
- 5 MR. KLEJST: -- a copy, based on your title and your
- 6 role within WMATA?
- 7 MR. CATOE: Yes.
- 8 MR. KLEJST: Now, what access did the chief safety
- 9 officer have with you to follow up on any of the items that were
- 10 identified as areas in need of corrective action when the chief
- 11 safety officer reported, it sounds like two levels below you, when
- 12 it reported to the chief administrative officer?
- 13 MR. CATOE: Instantaneous ability to meet with me. On
- 14 many occasions I met with the chief safety officer when she
- 15 reported to the chief administrative officer, had the ability
- 16 without an appointment just to walk in. There was no requirement
- 17 that they would set up a time. If there's an issue that that
- 18 person needed to discuss, then that person would meet with me.
- MR. KLEJST: And, Mr. Catoe, you mentioned earlier that
- 20 you present information to the board of directors that's safety
- 21 related; is that correct?
- MR. CATOE: Yes.
- MR. KLEJST: And how often would you do that? Would
- 24 that be on a monthly basis with the board of directors or would
- 25 that be quarterly or only to the group, the committee within WMATA

- 1 that -- or I'm sorry, the board of directors that deals with
- 2 safety?
- 3 MR. CATOE: The board of directors received information
- 4 on a monthly basis. There is also additional information should a
- 5 major event occur, or some not so major, they're notified when
- 6 that event occurs.
- 7 MR. KLEJST: And recognizing that all information can be
- 8 provided to the board of directors, what criteria do you use to
- 9 determine what information should be passed on through, say, your
- 10 direct reports presenting information to you or the chief safety
- 11 officer presenting information to you, to the point where it gets
- 12 passed onto the board of directors?
- 13 MR. CATOE: Well, one criteria, the first is we have a
- 14 format of information and it's data. It's what happened. It's
- 15 how many accidents, nature of accidents, whether they're vehicles,
- 16 individuals, customers, whatever. That's information that we
- 17 tabulate and we provide that to the board.
- In addition, should an event occur, I will make a
- 19 judgment call or some of my staff will make judgment calls, of
- 20 notifying the board directly. If there is an accident with
- 21 injuries, and they do not have to be major injuries, depending
- 22 upon the nature of the accident, we notify the board. In most
- 23 cases -- and one case, I think, we missed, if an operator is using
- 24 a cell phone and we get a report of that, generally the board is
- 25 notified. So we notify the board of a lot of information but we

- 1 have increased, of course, the intensity of that reporting since
- 2 June 22nd. But prior to that, if an event occurred where an
- 3 employee was injured, major injuries or any fatalities, we would
- 4 either, myself, call the board and also send a notification to the
- 5 board of directors.
- 6 MR. KLEJST: So it sounds as if you provide the board
- 7 with a considerable amount of information, is that correct, with
- 8 respect to safety?
- 9 MR. CATOE: I believe they get a great deal of
- 10 information on a monthly basis. Getting back to your question
- 11 though about the open items; again, I think it was selected items
- 12 we shared with the board prior to June 22nd.
- 13 MR. KLEJST: Okay. Thank you. Now, what type of
- 14 feedback would you get back from the board when you presented what
- 15 sounds like a considerable level of information?
- 16 MR. CATOE: Well, there is discussion at the board level
- 17 of the information that we provided, whether or not the indicators
- 18 showed an improvement in safety or that it indicated that
- 19 accidents or incidents were increasing, and there were times that
- 20 the board would ask us to give them more detail and ask what
- 21 actions we were taking to correct whatever direction our safety
- 22 indicators were going in.
- 23 MR. KLEJST: So you would actively engage with the board
- 24 of directors as you discuss the information that you're presenting
- 25 to them with respect to safety and accidents, injuries and things

- 1 along those lines?
- 2 MR. CATOE: It was primarily the chief safety officer
- 3 who was having the discussion, but there were times there was a
- 4 great deal of interaction from the board.
- MR. KLEJST: Well, there was -- okay. And both yourself
- 6 and the chief safety officer would be present in the room with the
- 7 board of directors presenting and discussing this information?
- 8 MR. CATOE: It would be an open meeting of the board.
- 9 MR. KLEJST: Open meeting of the board.
- 10 MR. CATOE: Board committee.
- 11 MR. KLEJST: And what level of feedback were you
- 12 provided from the board on these items?
- MR. CATOE: Various. Some meetings, the information did
- 14 not spark a discussion. In other meetings, there was a great deal
- 15 of interest depending upon what the information showed, and then
- 16 there were requests to show the information in various -- in other
- 17 formats so the board could get a better feel of what was happening
- 18 from a safety perspective.
- 19 MR. KLEJST: When you served in the capacity as general
- 20 manager, did you ever get direction from the board of directors as
- 21 far as how to handle a particular issue?
- 22 MR. CATOE: Dealing with safety or --
- 23 MR. KLEJST: Dealing with safety, yes.
- 24 MR. CATOE: There are many issues --
- 25 MR. KLEJST: Well, I understand. Dealing with safety.

- 1 MR. CATOE: Well, the obvious direction, and my
- 2 performance review concerned vehicle safety and employee safety.
- 3 It was clear, the board, the number one priority is to reduce our
- 4 accidents and to improve the safety of the organization.
- 5 MR. KLEJST: You had mentioned that both you and the
- 6 chief safety officer would present information to the board of
- 7 directors and there would be open dialogue discussing these. At
- 8 those meeting, were you ever provided with any direction as to how
- 9 a particular matter should be handled with respect to safety?
- 10 MR. CATOE: No, I don't recall being told how to fix
- 11 something. But I recall being told to fix things but not the
- 12 specifics of how to fix them.
- MR. KLEJST: Thank you. That was actually going to be
- 14 my next question. So you were told to take care of a problem, not
- 15 necessarily how to fix the problem.
- 16 MR. CATOE: Yes.
- MR. KLEJST: They were relying on you and your expertise
- 18 of both you and your management team to deal with that?
- MR. CATOE: Yes.
- 20 MR. KLEJST: Chief Taborn, does WMATA have a policy in
- 21 place that provides employees with protection against retaliation
- 22 for reporting safety-related items, maybe akin to being called
- 23 whistleblower protection?
- 24 CHIEF TABORN: Yes, sir, I do believe that they do as
- 25 well as the Department of Labor has a safety and security

1 whistleblower protection law that sort of prevents any retaliation

- 2 from any employee to reporting a safety or security-related
- 3 concern.
- 4 MR. KLEJST: And as far as the, again, Chief Taborn, the
- 5 need to report incidents to either the Tri-State Oversight
- 6 Committee or directly to the FTA, if there was a situation where
- 7 you had an automatic train protection failure, an employee
- 8 fatality, or even something as simple as a stop signal violation,
- 9 a near miss event, are any of those events, other than the
- 10 employee fatality, any of those events would you be required to
- 11 contact the Tri-State Oversight Committee, again, beyond those
- 12 that are required and defined by Part 659?
- 13 CHIEF TABORN: Not necessarily required but as a good
- 14 practice, we would share that information with the Tri-State
- 15 Oversight Committee, and that's just the normal practice that we
- 16 would want to be out front to reveal and to report any safety-
- 17 related situation that would cause anybody to be concerned, but
- 18 not necessarily a part of the requirements of 659 and their
- 19 reporting requirement.
- 20 MR. KLEJST: But as a matter of practice --
- 21 CHIEF TABORN: Right.
- 22 MR. KLEJST: -- you do that. And as far as your
- 23 interaction, you as the chief safety officer, with the Tri-State
- 24 Oversight Committee -- let me back up actually a step. Would you
- 25 be the primary point of contact with the Tri-State Oversight

- 1 Committee?
- 2 CHIEF TABORN: Yes.
- 3 MR. KLEJST: And how often would you contact them
- 4 separate and apart from the meetings that you described dealing
- 5 with the capture program or any monthly meetings that might be
- 6 established by the Tri-State Oversight Committee?
- 7 CHIEF TABORN: I'm probably in contact with members of
- 8 the Tri-State Oversight Committee probably twice a week, something
- 9 like that, discussing a variety of things, more recently than
- 10 probably in the past.
- 11 MR. KLEJST: Chief Taborn, can you think of a very
- 12 specific example of when the safety department overruled the
- 13 decision that was made by one of the operating departments as far
- 14 as a safety-related issue was concerned?
- 15 CHIEF TABORN: I wouldn't say overruled. I think there
- 16 are always opportunities where we get together and we understand
- 17 the dynamics of what has taken place with regards to operations in
- 18 the rail environment, and Mr. Kubicek and I will consult and we
- 19 will talk about the need to ensure that we eliminate that
- 20 possibility of being a safety problem. Dave will make sure that
- 21 if it's single tracking, that's what we'll do. If in fact work
- 22 needs to be done to repair that particular area, we will ensure
- 23 that a safety person is there and the safety protective measures
- 24 that are set up to ensure that those workers complete that job
- 25 would be done, and that would be something that would be done in a

- 1 coordinated fashion.
- MR. KLEJST: And that would be subsequent to the June
- 3 22nd accident --
- 4 CHIEF TABORN: Yes.
- 5 MR. KLEJST: -- where you later were appointed as the
- 6 acting chief safety officer?
- 7 CHIEF TABORN: Yes.
- 8 MR. KLEJST: Are you aware or perhaps Mr. Kubicek might
- 9 be in a position to respond to this question more effectively,
- 10 were there examples that you can think of that a safety officer or
- 11 someone within the safety department felt as if an operation
- 12 should be suspended, modified immediately, that essentially the
- 13 safety department overruled an operating-level decision in the
- 14 interest of safety prior to the June 22nd incident? Mr. Kubicek?
- 15 I'm sorry.
- 16 MR. KUBICEK: Yes. I can say that, say, for instance,
- 17 we were looking at specific work plans and that if they weren't
- 18 appropriately submitted and they were not put in place, work did
- 19 not permit until we got those issues resolved. That was prior to
- 20 the incident, and I can also speak post-incident as well. For
- 21 example, we had a work crew out working on the Green/Yellow Line.
- 22 They didn't have the appropriate equipment there. The safety
- 23 officer was present. The safety officer, they did not have the
- 24 minimum flagging materials there and they shut down the program. I
- 25 was contacted, had no problem with it. We pulled the entire work

- 1 crew off because we wanted to find out why we would have such an
- 2 issue.
- 3 MR. KLEJST: Okay. Thank you. And, Mr. Catoe, we
- 4 addressed earlier this morning some of the issues as far as the
- 5 reporting relationship with the chief safety officer and the
- 6 general manager, and the chief safety officer currently reports to
- 7 you?
- 8 MR. CATOE: Yes.
- 9 MR. KLEJST: However, you stated earlier today that you
- 10 thought that it was still effective if they reported two levels
- 11 below you; is that correct also?
- MR. CATOE: What I said was they still had the ability
- 13 to communicate, and I was trying to answer your last question for
- 14 you, that the chief safety officer -- I'm aware of two specific
- 15 cases, weeks before the accident, where the chief safety officer
- 16 shut down a work site, one with a contractor and one with Dave's
- 17 staff, and she notified me when she took that action, and that was
- 18 when she was reporting to the chief administrative officer.
- 19 MR. KLEJST: And again you -- I appreciate that example.
- 20 The rationale for moving the chief safety officer reporting to the
- 21 chief administrative officer to direct report to you, if you could
- 22 share that with me please?
- 23 MR. CATOE: Well, historically and, again, you know,
- 24 it's what I'm used to in various organizations. When I was in Los
- 25 Angeles, the chief safety officer reported to me, as the deputy

- 1 chief executive officer, because I was responsible for operations.
- 2 And ultimately I have the responsibility to report to the CEO.
- 3 Here, initially, the chief safety officer, as I said, reported to
- 4 the director or the head, chief security and safety officer or
- 5 official, and I made a change in the organizational structure to
- 6 have, from an administrative standpoint, the chief safety officer
- 7 reporting to the chief administrative officer. But from a safety
- 8 standpoint, if there were issues that needed my attention, she had
- 9 the abilities, as she took, to notify me directly. She did not
- 10 have to go through someone.
- 11 MR. KLEJST: But yet you changed that relationship to
- 12 that of her direct report to you, did you not?
- MR. CATOE: Yes, I did.
- 14 MR. KLEJST: And again, the rationale for that was? If
- 15 you could share that with me, please.
- 16 MR. CATOE: Yeah, the rationale was obviously we had a
- 17 terrible event on June 22nd, and everyone within the agency, while
- 18 we were safety focused, became even more safety focused, and I
- 19 felt that it was very important for that person to report to me,
- 20 and I eliminated the position that she reported to was the other
- 21 reason.
- 22 MR. KLEJST: Thank you. One final question. The
- 23 actions taken by WMATA in connection with recommendations made by
- 24 the National Transportation Safety Board, there are four examples
- 25 here that I'd like to pursue, one was the Woodley Park-Zoo

- 1 collision, another was the DuPont Circle employee fatality, the
- 2 Eisenhower Avenue employee fatalities, double fatality, and the
- 3 Mt. Vernon Square derailment. What actions has the WMATA staff
- 4 taken to respond to the Safety Board's recommendations in these
- 5 four accidents?
- 6 MR. CATOE: In regard to the Woodley Park accident,
- 7 install rollback protections on the Metrorail 2000, 3000, 4000 and
- 8 5000 Series railcars, and the long-term actions will be to retire
- 9 the 1000 Series railcars as soon as feasible based on
- 10 recommendations by consultants Booz Allen Hamilton.
- 11 MR. KLEJST: And as far as the recommendations made in
- 12 connection with the DuPont Circle employee fatality as well as the
- 13 Eisenhower Avenue fatalities, there were some recommendations with
- 14 regard to modifying right-of-way protection rules. Has that been
- 15 fully implemented?
- 16 MR. CATOE: No. With regard to reviewing the Metrorail
- 17 Safety Rule and Procedures Handbook, we're in the process now of
- 18 revising that. The immediate actions that WMATA took, effective
- 19 June 26th, was to revise -- in the process of revising that
- 20 rulebook, and rule 4.180, by adding paragraph (k), the revisions
- 21 establish a method to restrict the train speed entering areas
- 22 where workers are in a stationary location for more than 3 minutes
- 23 to 15 miles per hour.
- 24 Special Order 0603 issued various revisions, have
- 25 brought us to Special Order 0706, issued November 9, 2007, and

- 1 we're currently working with a variety of federal agencies,
- 2 including the Tri-State Oversight Committee and the FTA, to see
- 3 if, in fact, 0706 is the best possible order to have in place, and
- 4 so we are working on that now.
- 5 MR. KLEJST: But you still have further actions that
- 6 you're going to take with respect to the employee fatalities that
- 7 took place at DuPont Circle and Eisenhower Avenue?
- 8 CHIEF TABORN: Yes, sir.
- 9 MR. KLEJST: Okay. Even though they took place in 2006?
- 10 CHIEF TABORN: I mean, we have recommended and we're
- 11 adhering to those recommendations. Again, we have reviewed the
- 12 wayside protections for those workers. We've been implementing
- 13 things such as flagging, other protective measures and Dave, in
- 14 his shop, Dave instituted based upon those activities other
- 15 initial protective measures to be in place. But one of the big
- 16 things is to revise that Metrorail Safety Handbook Rule, but in
- 17 the interim, we have put into place special orders.
- 18 MR. KLEJST: And finally the Mt. Vernon Square
- 19 derailment?
- 20 CHIEF TABORN: Mt. Vernon Square, which recommended that
- 21 we develop standards for allowable wheel roughness, implement
- 22 post-wheel truing procedures. And you can speak to that.
- 23 MR. KUBICEK: We have standardized all of our wheel
- 24 truing, you know, for our roughness that was found out there. In
- 25 fact, we still are holding out one piece of equipment for several

- 1 years because we haven't gotten the final version for our
- 2 roughness thickness. So it has been decommissioned 100 percent.
- 3 We've also taken a much more aggressive process of, you know,
- 4 exchanging these guarded number 8 turnouts. For those seen within
- 5 the last year, year and a half, we've started taking advantage of
- 6 weekend shutdowns where we've went in and started changing
- 7 infrastructure. It's created a big inconvenience on our
- 8 customers, but from an infrastructure standpoint, it's something
- 9 that needs to be done based on the duty cycle and the placement of
- 10 some of these switch in their designs. So there's been a heavy
- 11 commitment on our part on the mainline, in our yards, now and
- 12 continued through the future.
- 13 MR. KLEJST: In the master list of corrective action
- 14 items that was presented to us at the Safety Board, there were a
- 15 number of items in each of these different categories still listed
- 16 as open. Does the availability of track time, the availability of
- 17 resources prohibit you from fully implementing the recommendations
- 18 that were made in connection with these incidents, Chief Taborn?
- 19 CHIEF TABORN: Excuse me for a second.
- 20 MR. KLEJST: Well, perhaps I'll rephrase it to a more
- 21 question in the interest of time here. There are a number of
- 22 recommendations and open items that were made in connection with
- 23 those incidents. Does the availability of access to the track or
- 24 the need to operate service, do any of those prohibit you from
- 25 fully implementing any of the safety recommendations that may have

- 1 been made in connection with accidents or incidents over the
- 2 years? Either Mr. Kubicek or Chief Taborn.
- 3 MR. KUBICEK: If I could. From a schedule perspective,
- 4 whenever we talk about, for example, changing out the guarded
- 5 number 8s; there's hundreds of them. We have challenges in
- 6 working with direct fixation as well as traditional tie. We are
- 7 challenged also from the standpoint that if we were to try to
- 8 address every one of these at one time, we really effectively
- 9 couldn't operate the rail system. I mean, we would be single
- 10 tracking all the time, and it would probably create other issues.
- 11 The other thing is going to be the availability for the
- 12 manufacturers to produce some of the equipment that we have
- 13 because every location that we go to with our design, it is
- 14 especially made, you know, for each respective location. So the
- 15 more track time we can get, the longer outages. Yes, we can
- 16 accelerate, but even with that, there is a limitation on how much
- 17 that you can actually change out.
- 18 CHIEF TABORN: Specifically, regarding the number 8
- 19 turnout, out of 178 mainline number 8 turnouts, we have replaced
- 20 114, and we're on schedule to complete that by FY 2012. And so
- 21 that factors into the questions as you've stated with regards to
- 22 access to the rail system.
- MR. KLEJST: Okay. Thank you.
- Mr. Chairman, I've completed my questioning.
- 25 CHAIRMAN SUMWALT: Thank you. Any follow-ups from the

- 1 Technical Panel?
- There is Mr. Watson.
- MR. WATSON: Yes. Mr. Kubicek, you talked about you
- 4 didn't know the number off the top of your head of the
- 5 noncompliance reports that had been brought forward to you. First
- 6 off, I'd like to sort out the two types of typical noncompliance
- 7 that there are. There's equipment noncompliance where you've got
- 8 something wrong, you've got a thin wheel or you've got a load
- 9 leveler that doesn't work or you've got something wrong with the
- 10 equipment. So if you set those aside, and you've noncompliance of
- 11 the folks. They've done something, like this incident you
- 12 mentioned on the Yellow/Green Line, where there's some error that
- 13 someone has, you know, apparently made. So of those second type
- of noncompliance reports, even though we don't know the number,
- 15 I'd like to know the process. What is the process when something
- 16 bubbles to your level that someone has made an error? What type
- 17 of corrective action is it that you do? And I would propose, you
- 18 know, is it retraining? Is it some form of discipline? Is it
- 19 something that you talk to the peer groups? And then I'd like the
- 20 answer in two parts. First, what is it you do? And then, who is
- 21 it you do it with? Are the labor organizations included? The
- 22 safety department, is it included? Are the training, the ops?
- 23 Who is it that's included in this corrective action to bring about
- 24 compliance in the future?
- MR. KUBICEK: Okay. Say, for instance, whenever we have

- 1 an issue where an individual is not performing the way that they
- 2 should, say, if it's out on the right-of-way. You know, I will
- 3 get a call and I will definitely, you know, ask those respective
- 4 individuals, you know, depending on the nature of it. For
- 5 example, the incident that I warranted where we had a crew out
- 6 there on the alignment and we had a supervisor that was out there,
- 7 I fully supported the safety recommendation and my staff and we
- 8 pulled everybody off the alignment. What we did is we brought the
- 9 folks in, we spoke with them. We got the perspective of the
- 10 safety department, you know, what their respective concerns were.
- 11 We interviewed the respective employees and we took the
- 12 appropriate discipline on the management officials that, you know,
- 13 did fail.
- If it involves an hourly employee, if I have specific
- 15 issues, I do contact the Union via e-mail, but most of the time
- 16 cell phone at all times of the day or the evening time as I'm
- 17 alerted, you know, to these particular incidents.
- 18 MR. WATSON: All right. And retraining or -- how about
- 19 a peer group? If you've got one group out there working, flagging
- 20 on one spot, there's probably other groups just like it in other
- 21 places. Is there any kind of an informational system that you do
- 22 to inform the general work population?
- MR. KUBICEK: Yeah, that gets into where we're talking
- 24 about the standardization of our information from one group, you
- 25 know, to the next. For example, we have a track access document

- 1 that we put out that we publicize to everybody to say, you know,
- 2 this is where this work is going to be taking place, to try to
- 3 provide advance notice, try to get this information into the hands
- 4 of the operators as well, whenever they're picking up their daily,
- 5 you know, run assignments. The key is to try to get as much
- 6 information into the hands of the employees on a proactive basis
- 7 as possible at the same point in time trying to establish a very
- 8 clear and concise protocol and expectations of their conduct while
- 9 they're out there.
- MR. WATSON: All right. And is that, you know, pretty
- 11 well universal across all the departments? Say, a mechanic did
- 12 something or an operating person or what have you, is that process
- 13 pretty much the same?
- MR. KUBICEK: Well, the protocol, again, it will
- 15 differentiate on the severity, you know, of the incident,
- 16 naturally. But we're here to focus on the business climate that
- 17 we're working in, you know, our expectations in working with our
- 18 employees as well as our management folks to get everybody's
- 19 attention that safety, you know, is key. I mean, as the general
- 20 manager stated, you know, there's a better accountability that's
- 21 been instilled in this agency, which in my opinion, I was a strong
- 22 supporter of, and so it's from top to bottom.
- 23 MR. WATSON: All right. Thank you. That's all I have.
- 24 CHAIRMAN SUMWALT: Any further questions? Mr. Guru?
- 25 MR. GURA: Yes. Mark, would you please put up Exhibit

- 1 P1-a, 659?
- 2 Okay. This is 659, 237(e). And Mr. Klejst was talking
- 3 about the open items, and this goes to the NTSB's recommendations
- 4 and findings and this question goes to Mr. Catoe.
- 5 MR. CATOE: Yes.
- 6 MR. GURA: When you look at (e), it talks about the
- 7 oversight agency basically working with you all. What kind of
- 8 input do they have with you when you have these recommendations
- 9 coming from us and findings coming from us? Do they actually sit
- 10 down with you and have input in solving this or do you more or
- 11 less solve it and then kind of tell them what you plan on doing?
- 12 MR. CATOE: Well, again there's different levels of
- 13 recommendations. There's recommendations, for example, to replace
- 14 the 1000 Series cars. There's recommendations that we're
- 15 implementing on some of the 8 turns as well as the outside latches
- 16 to the doors. My interaction with the TOC has not been one where
- 17 they have sat down and worked with us in resolving it. That
- 18 interaction has been with the chief safety officer. My experience
- 19 with the TOC has been if they have major issues with a lack of
- 20 responsiveness on the part of our safety department or when
- 21 meeting on a scheduled standpoint of input, but I have not sat
- 22 down with them specifically and worked out an issue of a major
- 23 finding by the NTSB.
- 24 MR. GURA: Okay. And then it goes to another, in the
- 25 659, and I'll just move to .25. Is that still in there?

- 1 And basically 659.25 kind of requires you all to do an
- 2 annual review of your System Safety Program Plan. Okay. So
- 3 you've got your annual review of your System Safety Program Plan.
- 4 Now is that an internal review or is that something that TOC is
- 5 involved with also?
- 6 CHIEF TABORN: TOC is very much involved with that.
- 7 Internally we will address those areas that we propose to change.
- 8 If there's any particular rules that we want to change within 659
- 9 or the SSPP, we will make those and we will provide that to the
- 10 oversight agency and they will approve that change or approve that
- 11 System Safety Program Plan and that is, in fact, done on an annual
- 12 basis.
- 13 MR. GURA: It is. Right. And then 659.29 requires --
- 14 now, this is a triennial review. Now, the triennial review, that
- 15 is an on-site review of your System Safety Program Plan and the
- 16 field; is that correct?
- 17 CHIEF TABORN: Yes, sir.
- 18 MR. GURA: Okay. Now are they involved with your folks
- 19 in the actual field inspection or do you have some type of
- 20 contractor or who all does that? Is it separate departments when
- 21 they do a specific department?
- 22 CHIEF TABORN: If, in fact, the oversight agency wishes
- 23 to see any part of our operations, we make sure that there's a
- 24 person that he or she could meet up with and then it is determined
- 25 what area that they want to look at. It's entirely up to the

- 1 oversight agency as to what area they specifically want to
- 2 inspect.
- 3 MR. GURA: Okay. It's not an entire review of your
- 4 system then; it's just kind of pick and choose an area?
- 5 CHIEF TABORN: It is incumbent upon the oversight agency
- 6 to determine what areas they want to inspect. It may be a follow-
- 7 up on a previous audit, to confirm the fact that we have done in
- 8 fact what we purported to do, and so that's incumbent upon the
- 9 oversight agency.
- 10 MR. GURA: Okay. And this will be my last question on
- 11 that. Now, does TOC have a daily oversight presence on your WMATA
- 12 system? Is there someone there, you know, like maybe this week
- 13 looking at operations, maybe next week mechanical and next week
- 14 signal or track, something of that nature?
- 15 CHIEF TABORN: I wouldn't say necessarily daily. I
- 16 think they have a place that they can rest their hat at the
- 17 agency, but again depending upon how they operate as a committee,
- 18 they will determine whether or not they can afford to have a
- 19 representative there on site at the transit agency. So I can say
- 20 that recently we've implemented that position, that location, that
- 21 office, but sometimes they have other duties as assigned.
- 22 MR. GURA: Okay. So from what I understand you're
- 23 saying, you created an office at your physical plant for them to
- 24 work out of?
- 25 CHIEF TABORN: Right. We've afforded them the

- 1 opportunity to have a space, absolutely.
- MR. GURA: Okay. That's all the questions I have.
- 3 CHAIRMAN SUMWALT: Okay. Thank you very much. Any
- 4 other questions from the Technical Panel?
- 5 Mark Jones or Rick Narvell. I'm not sure which one it
- 6 is. Mark Jones?
- 7 MR. JONES: Thank you, Mr. Chairman. Just one quick
- 8 question for Mr. Kubicek, a follow-up to Mr. Watson's question a
- 9 minute ago about the different, you know, disciplinary action and
- 10 so forth. Do you keep that in a database like when your
- 11 supervisors do their audit checks or compliance checks and you do
- 12 find something that you give discipline on or remedial action, do
- 13 you put that in your database?
- 14 MR. KUBICEK: When it gets into the specifics of the
- 15 railcar maintenance, we would track the activity, you know, of
- 16 discipline. There's e-mails. That's one of the things that the
- 17 chief was talking about that we're looking at globally, that we
- 18 really need to have one comprehensive database for us to put all
- 19 of this information in, you know, from an audit, you know,
- 20 perspective for us to really drill down. So it would be in
- 21 different segments, but it's not centralized as efficiently as we
- 22 would like.
- MR. JONES: Thank you.
- 24 CHAIRMAN SUMWALT: Any further questions from the
- 25 Technical Panel?

- Okay. So here's the plan. We're now going to go to the
- 2 Board of Inquiry for questions up here. My plan is to go, let us
- 3 finish up this round before we break, but I've got to be
- 4 considerate of everyone, the witnesses, the parties, the Technical
- 5 Panel, my colleagues up here. It's probably going to take about a
- 6 half an hour. I want to defer to you gentlemen first because
- 7 you're literally on the hot seat. Do you have enough capacity to
- 8 go for another half hour?
- 9 PANEL: Yes.
- 10 CHAIRMAN SUMWALT: Okay. Then let's plow through that.
- 11 And the Chairman would like to enter four exhibits into the
- 12 record, and I will pass these along to the Hearing Officer. The
- 13 first that I would like to enter would be a document entitled
- 14 "Procedures for WMATA Board of Directors 2010". So, Mr.
- 15 Dobranetski, if you will assign exhibit numbers to these as we go
- 16 along.
- 17 HEARING OFFICER DOBRANETSKI: Okay. That will be
- 18 Exhibit P1-1.
- 19 CHAIRMAN SUMWALT: Okay. Thank you. P1-1. The next I
- 20 have is a document from WMATA's Board entitled "Committee
- 21 Assignments Metro Board of Directors, February 26, 2009".
- 22 HEARING OFFICER DOBRANETSKI: That will be Exhibit P1-m.
- 23 CHAIRMAN SUMWALT: Thank you. The next is one entitled
- 24 "Revised Committee Assignments Metro Board of Directors, January
- 25 28, 2010".

- 1 HEARING OFFICER DOBRANETSKI: That will be Exhibit P1-n.
- 2 CHAIRMAN SUMWALT: Thank you. And the last would be a
- 3 WMATA document entitled "Customer Services, Operations and Safety
- 4 Committee Board Information Item 4a, "dated June 25, 2009. This
- 5 is the Safety and Security Report.
- 6 HEARING OFFICER DOBRANETSKI: That will be Exhibit P1-o.
- 7 CHAIRMAN SUMWALT: P1-o, thank you very much. These
- 8 have been entered into the list of exhibits at this time.
- 9 HEARING OFFICER DOBRANETSKI: Yes, sir.
- 10 CHAIRMAN SUMWALT: Thank you, sir. Okay. So we'll
- 11 start out on the Board of Inquiry, and I'll start with Mr. Ritter.
- 12 MR. RITTER: I have no questions at this time.
- 13 CHAIRMAN SUMWALT: Thank you. Dr. Kolly?
- 14 DR. KOLLY: Yes, I have a few questions. I'd like to
- 15 follow up on the topic of event recorders and perhaps, Mr.
- 16 Kubicek, you might field these questions. Why do some of the
- 17 transit cars equipped with recorders and some are not? You
- 18 indicated that the 1000 Series are not but the later series are.
- 19 Why is that?
- 20 MR. KUBICEK: It was based on the age, I guess, of their
- 21 procurement, whenever they were bought and/or retrofitted.
- 22 DR. KOLLY: So is there a requirement for these cars to
- 23 carry event recorders?
- 24 MR. KUBICEK: I'm not aware of an actual requirement.
- 25 DR. KOLLY: So the fact that the newer cars have event

- 1 recorders, are you indicating that that is solely because that's
- 2 the way they're delivered to you or is that the way you're
- 3 ordering them?
- 4 MR. KUBICEK: This the way they were specified in the
- 5 railcars. I do believe in some other correspondence that I've
- 6 read that, you know, there were some recommendations for this
- 7 equipment. So it has been integrated but definitely as to moving
- 8 forward in the advancement of this technology, it is a steadfast
- 9 requirement for our future procurements.
- DR. KOLLY: That's a WMATA requirement?
- 11 MR. KUBICEK: Yes, internally.
- DR. KOLLY: Okay. You mentioned earlier something to
- 13 the effect that your data shows that the recorders are reliable in
- 14 use. Can you explain that a little better?
- MR. KUBICEK: I would say that they are reliable to the
- 16 standpoint that whenever they were originally spec'ed out, they do
- 17 collect, you know, various information. I don't think that they
- 18 meet the new crashworthiness standards, you know, that are
- 19 established out there. They are a very helpful, you know,
- 20 investigation tool. They do have their limitations because some
- 21 of the equipment, you know, is over a decade old that has it, and
- 22 so the equipment that you get later on in life is definitely much
- 23 more robust as technology continues to advance.
- DR. KOLLY: And do you record any type of data regarding
- 25 its reliability? How do you know how reliable these event

- 1 recorders are on your system?
- MR. KUBICEK: We would start working through. Our first
- 3 area would be the maintenance database that we have
- 4 electronically, start tracking the failures and the overall
- 5 performance. That would be the first area that you'd start
- 6 pulling.
- 7 DR. KOLLY: And that's currently done now and was it
- 8 done at the time of the accident as well?
- 9 MR. KUBICEK: Based on some of the equipment that it
- 10 had, you know, it's part of the contractual requirements as well,
- 11 is overall, you know, performance of the system. So there would
- 12 be some mean distance between failure criteria that was
- 13 established, as well as our reliability folks would be working
- 14 with that information as well.
- DR. KOLLY: Okay. Is that something that you can
- 16 provide as an exhibit for this hearing, information on the
- 17 reliability of your recorders?
- 18 MR. KUBICEK: If needed, yes.
- DR. KOLLY: Mr. Chairman, I'd like to request that that
- 20 data be provided to the hearing as an exhibit.
- 21 CHAIRMAN SUMWALT: That would be good, and that is an
- 22 official request.
- 23 MR. KUBICEK: Might I ask a specific time frame to help
- 24 me understand where I should direct my resources and staff to go
- 25 review this?

1 DR. KOLLY: Sure. I'd like to go back to at least the

- 2 year 2006.
- 3 MR. KUBICEK: Okay.
- DR. KOLLY: Mr. Kubicek, you mentioned that the
- 5 recorders are on an inspection schedule and you mentioned 30-,
- 6 60-, 90-day inspection schedules. Can you offer some more
- 7 specifics about that inspection schedule and specifically, do you
- 8 know how the event recorders are inspected?
- 9 MR. KUBICEK: I cannot comment that I personally know
- 10 the exact detail on how they're, you know, inspected, you know,
- 11 during these cycles. I do know that there would be a more
- 12 aggressive approach than just a daily, you know, function where
- 13 they just might look at it. It could also require where the
- 14 individuals would maybe, you know, plug in a PC, you know, check
- 15 the information and stuff that is sitting in there and get some
- 16 type of diagnostic information.
- 17 DR. KOLLY: Does WMATA use the recorders in any type of
- 18 operations or performance monitoring or is any of that data
- 19 involved in your safety program?
- 20 MR. KUBICEK: I could say that if we have an incident,
- 21 say, for instance if we had a red signal violation or if we had
- 22 some other operational issue or we had a railcar, say, for
- 23 instance, that had some type of a performance issue, part of our
- 24 review process would be to go look into the information contained
- 25 within the event recorder. So it would be used, you know, outside

- 1 of the normal, you know, accident or incident, you know, that is
- 2 major. We try to incorporate this into our day-to-day business.
- 3 It's a very powerful tool and that's why we continue to expand
- 4 and, on my part, insist that the new equipment that we have is
- 5 much more robust and, you know, it's just part of our business
- 6 model moving forward.
- 7 DR. KOLLY: Okay. And finally, you stated that it was,
- 8 I believe, a shop level decision to dispatch a transit car without
- 9 a working event recorder. How often has a car been withheld from
- 10 service for this reason? Are you familiar with the frequency?
- 11 MR. KUBICEK: I could not quantify that, you know, as
- 12 far as how often that it does occur.
- 13 DR. KOLLY: Are you aware of instances when that has
- 14 occurred?
- MR. KUBICEK: Has it personally been brought up to my
- 16 level, I've been questioned or been asked, you know, that we're
- 17 going to be releasing a railcar? Yes, I've been made aware of it,
- 18 but again it gets back to the status of the equipment. We do have
- 19 to provide service. And the other thing is the overall
- 20 performance of the system not working is, is it a catastrophic
- 21 system if it's not performing properly? You know, and, again, we
- 22 place our focus on doors and brakes, propulsion, on the vital
- 23 systems at this time.
- 24 DR. KOLLY: Okay. If it were to be, let's say, someone
- 25 at the shop level decided that they wanted to withhold a car from

- 1 dispatch because of a failed event recorder, what process would
- 2 take place?
- MR. KUBICEK: On that part right there, that would be
- 4 the empowerment at the shop level. If somebody deemed that they
- 5 were concerned that the piece of equipment, they didn't want it to
- 6 roll, then we would support it accordingly.
- 7 DR. KOLLY: All right. Mr. Chairman, I have no further
- 8 questions.
- 9 CHAIRMAN SUMWALT: Thank you, Dr. Kolly.
- 10 Mr. Dobranetski?
- 11 HEARING OFFICER DOBRANETSKI: Thank you, Mr. Chairman.
- 12 I just have a few questions.
- 13 Mr. Taborn, how many people are in the safety department
- 14 related to, say, being in the field for safety as opposed to being
- 15 in the office going through records?
- 16 CHIEF TABORN: We have three divisions: the Regulatory
- 17 Compliance Division, the System Safety Division and we have the
- 18 Environmental, and in the System Safety Division, we currently
- 19 have 15 positions of which 4 of those are vacant positions, and so
- 20 there are roughly 11 people. These vacant position, I might add,
- 21 are newly created positions that the general manager has added to
- 22 the safety department.
- 23 HEARING OFFICER DOBRANETSKI: So you have 11 people out
- 24 in the field?
- 25 CHIEF TABORN: Yes, sir.

- 1 HEARING OFFICER DOBRANETSKI: Involved in safety
- 2 inspections and reviews?
- 3 CHIEF TABORN: Right. They are bus and rail.
- 4 HEARING OFFICER DOBRANETSKI: Bus and rail.
- 5 CHIEF TABORN: Yes.
- 6 HEARING OFFICER DOBRANETSKI: Okay. How many on the
- 7 rail side?
- 8 CHIEF TABORN: I don't know the exact number that's on
- 9 the rail side.
- 10 HEARING OFFICER DOBRANETSKI: Could you provide those
- 11 numbers for the Board please?
- 12 CHIEF TABORN: Absolutely.
- 13 HEARING OFFICER DOBRANETSKI: Mr. Taborn, when WMATA
- 14 investigates accidents or incidents, how is the Tri-State
- 15 Oversight Committee assured that the information that they receive
- 16 is unfiltered?
- 17 CHIEF TABORN: Well, we conduct an internal
- 18 investigation. We provide that investigation to the Tri-State
- 19 Oversight Committee. It has my or the chief safety officer's
- 20 assurance that the information that contained is valid, but it's
- 21 also incumbent upon the Tri-State Oversight Committee should they
- 22 wish to follow up on any particular area. And historically, we've
- 23 had a pretty good working relationship with respect to the
- 24 acceptance of investigations.
- 25 HEARING OFFICER DOBRANETSKI: Again, Mr. Taborn, what

- 1 safety responsibilities does the safety department have for train
- 2 operations, for the train operator, for signal and track
- 3 maintenance and equipment performance, both proposed for the new
- 4 equipment and existing equipment?
- 5 CHIEF TABORN: We work in concert with the respective
- 6 training department. That is in fact an area that we're working
- 7 diligently to enhance, because there has to be one universal
- 8 training location that speaks to all of those particular efforts,
- 9 and that's something that we will work with them to make sure that
- 10 rules and violations are put into place. But that is an area that
- 11 has been identified through our Tri-State Oversight Committee as
- 12 one that needs enhancement and improvement, and it speaks to the
- 13 questions that were raised relative to the corrective actions and
- 14 how does that find its way into a training curriculum or training
- 15 manual, and that is the area that we need to make sure that there
- 16 is a connectivity to.
- 17 HEARING OFFICER DOBRANETSKI: Okay. Thank you. But my
- 18 question wasn't about training. My question was what safety
- 19 responsibilities does the safety department have for train
- 20 operations, for the train operator, for signal and track
- 21 maintenance, for equipment performance for both new equipment and
- 22 existing equipment? Not training.
- 23 CHIEF TABORN: Right. We overview the operations, the
- 24 training that these particular people receive, and so we work
- 25 hand-in-hand to make sure that their curriculum that tells them

- 1 exactly what it is that their duties, roles and responsibilities
- 2 are, how they apply or respond to a respective rule is applied.
- 3 And so we work in conjunction with operations to make sure that
- 4 whatever is identified as part of their curriculum meets the
- 5 safety requirements.
- 6 HEARING OFFICER DOBRANETSKI: Okay. Then let me
- 7 paraphrase your answer. As I understand it, that the safety
- 8 department has no responsibility other than overview of training
- 9 for individuals?
- 10 CHIEF TABORN: Absolutely, or if there is some reported
- 11 incidents that reveal a need.
- 12 HEARING OFFICER DOBRANETSKI: Thank you. You've
- 13 answered my question.
- 14 Mr. Catoe, how have you been evaluating the performance
- 15 of train operators and the OCC personnel since the June accident?
- 16 I'm sorry. Mr. Kubicek.
- 17 MR. KUBICEK: Since the June incident, again the earlier
- 18 database that I talked about, that has been our staple of us going
- 19 out and monitoring the compliance of the operators on what they're
- 20 doing, how their auditing. Since the June incident as well, I've
- 21 brought in a new head of my training, instruction department, and
- 22 he oversees the training not only of the operators but also of my
- 23 rail operations control center. So there's been some structural
- 24 changes as well to increase the focus of that, to provide a little
- 25 bit more hands on. We've recently hired some more operations

- 1 controllers as well, which we greatly needed, and providing them a
- 2 little different format as far as, you know, for training and
- 3 follow-up.
- I would also say that one of the things I think that's
- 5 been proven very noteworthy is that not only whenever we finish
- 6 training an individual, especially with the new operators, we're
- 7 also having them where we have a follow-up like in a one-month or
- 8 two-month or three-month cycle. So in that way, it's just one
- 9 thing, not only is it important to get the individual trained, but
- 10 also start inducing some follow-up with these individuals to get
- 11 their feedback on how they're performing as well as what we need
- 12 to do to better restructure our training department to make them
- 13 more effective.
- 14 HEARING OFFICER DOBRANETSKI: Okay. Again, I thank you
- 15 for the answer about the training, but my question did not deal
- 16 with training. It's how do you evaluate the performance of your
- 17 operators and OCC personnel?
- MR. KUBICEK: Again, I would go that I would look at the
- 19 overall auditing of the status of our operators, you know, as far
- 20 as are they making the correct announcements? Are they making the
- 21 viable stops? There's a reporting, you know, mechanism on that.
- 22 As far as the overview of the rail operations control
- 23 center, again it's been the movement of providing more resources,
- 24 you know, to these individuals.
- 25 HEARING OFFICER DOBRANETSKI: Okay. But I still don't

- 1 follow how you evaluate their performance? How do you know that
- 2 they're doing what's expected of them as a train operator? How
- 3 are they complying with your rules? How are they complying with
- 4 the train operations and your OCC personnel? How are they
- 5 complying with what you expect of them as their duties? I mean,
- 6 do you have anybody there that goes with them and looks to see
- 7 what they're doing or how they're doing it?
- 8 MR. KUBICEK: For example, like if we have an operator
- 9 that is operating a train and they are not making the proper
- 10 announcements, there would be something that would be noted at the
- 11 time, and then there would be a note also where they possibly
- 12 reinstructed the individual or reinstructed them there on the
- 13 site. If it looked like the individual over a period of time had
- 14 several issues, then we might go back through and recycle them
- 15 through training. I would have to, you know, provide more of a
- 16 quantitative report structure on the way that we're working with
- 17 it. It's kind of hard for me to explain all the components that
- 18 we have as far as what we evaluate our staff on.
- 19 When it gets into the rail operations control center,
- 20 again the evaluation in that respective area is a matter of, you
- 21 know, training and resources and the monitoring of their status as
- 22 well as the feedback of the individuals.
- 23 HEARING OFFICER DOBRANETSKI: Do you have people
- 24 watching what they -- how they do it, to evaluate them?
- 25 MR. KUBICEK: Yes, we have management officials. Say,

- 1 for instance, in our rail operations control center, there's
- 2 layers of management, you know, behind them that are monitoring
- 3 these individuals on an regular basis. If somebody's having an
- 4 issue with somebody, then our rail operations control center
- 5 director would, you know, note that accordingly, and then they
- 6 would look at either, you know, having to reinstruct the
- 7 individual or maybe go back through a different retraining cycle.
- 8 HEARING OFFICER DOBRANETSKI: Since the accident, and
- 9 everyone knows that WMATA's gone to a manual train operation, have
- 10 you provided any specific instruction to your train operators now
- 11 that they're 100 percent manual operation?
- 12 MR. KUBICEK: Yes.
- 13 HEARING OFFICER DOBRANETSKI: And you have told them
- 14 what?
- MR. KUBICEK: Well, we've given them notification, a
- 16 letter that's saying we're operating in manual and also that we're
- 17 pulling to the end of the platform as well to position our trains,
- 18 to make sure that we're as consistent as possible.
- 19 HEARING OFFICER DOBRANETSKI: Do you have managers that
- 20 ride the trains, not just sitting up with the operator, but in the
- 21 train itself to monitor how well things are going?
- 22 MR. KUBICEK: Yes, we do have frontline supervision. We
- 23 have superintendents. I've even expanded my management team
- 24 towards we actually have individuals working weekends and off
- 25 periods as well at nights. That wasn't previously done.

- 1 HEARING OFFICER DOBRANETSKI: Is there any WMATA
- 2 requirement or other requirement that requires your train
- 3 operators to demonstrate the operator's proficiency periodically?
- 4 MR. KUBICEK: There is a certification or
- 5 recertification process, yes.
- 6 HEARING OFFICER DOBRANETSKI: And how often do they have
- 7 to be recertified?
- 8 MR. KUBICEK: It's my understanding every two years.
- 9 HEARING OFFICER DOBRANETSKI: Mr. Benjamin, when did the
- 10 Metro board realize that it no longer had the new reliable system
- 11 from 1976 and that it had to address the maintenance and upgrading
- 12 of the operating system and provide for replacement equipment?
- MR. BENJAMIN: The first report on that subject was
- 14 given to the board in 1989.
- 15 HEARING OFFICER DOBRANETSKI: So since 1989, you've been
- 16 planning for the upgrading and replacement of equipment?
- 17 MR. BENJAMIN: That's right.
- 18 HEARING OFFICER DOBRANETSKI: Okay. Of the equipment
- 19 you're purchasing now, the 7000 Series cars, is that new equipment
- 20 for the Dulles Corridor Project or is that replacement equipment?
- MR. BENJAMIN: It's actually both. The first set are
- 22 for the Dulles Corridor. The rest are meant as replacements for
- 23 the 1000 Series cars.
- 24 HEARING OFFICER DOBRANETSKI: Okay. How many would that
- 25 be in numbers?

- 1 MR. BENJAMIN: Well, the first set is 50.
- 2 MR. KUBICEK: We have a base for Dulles of 64, and the
- 3 replacement of the 1000 Series, we have a quantitative number of
- 4 300.
- 5 HEARING OFFICER DOBRANETSKI: Okay. So out of 364 cars,
- 6 the second set of the 300 would be for replacing the 1000 Series
- 7 cars?
- 8 MR. KUBICEK: Yes.
- 9 HEARING OFFICER DOBRANETSKI: Okay.
- 10 MR. KUBICEK: As well as we have other options built in
- 11 there as well for the rehab or possible replacement of our 4000
- 12 Series railcars as well as future growth.
- HEARING OFFICER DOBRANETSKI: Okay. So when you
- 14 purchased the 6000 Series cars, those were just for additional
- 15 cars, not for replacement?
- MR. KUBICEK: That was for growth.
- 17 HEARING OFFICER DOBRANETSKI: Okay. Mr. Catoe, just two
- 18 short questions for you. One, what was the total dollar damage
- 19 estimate of the June accident?
- 20 MR. CATOE: The dollar estimate for the vehicles
- 21 themselves was in the neighborhood in excess of \$12 million.
- 22 That's only the vehicles themselves. That does not include any
- 23 other expenses.
- 24 HEARING OFFICER DOBRANETSKI: Okay. Could WMATA provide
- 25 the Board with the total damages for the June 22nd accident?

- 1 MR. CATOE: Yes.
- 2 HEARING OFFICER DOBRANETSKI: Thank you. My last
- 3 question. Mr. Catoe, when WMATA returns to automatic train
- 4 operations, how will WMATA test to ensure that the system will
- 5 perform as expected?
- 6 MR. CATOE: There are many tests. The first test is
- 7 we're in the process of developing a real time system,
- 8 computerized system that would tell us if there's any signal
- 9 problems or loss of shunt within the system, and that process is
- 10 underway today and we hope to have that system developed before
- 11 the end of the year. That will tell us if we have issues, and we
- 12 will respond to those issues based upon new procedures anytime
- 13 there's any signal of any issues of communications between our
- 14 cars and the control room that we would immediately dispatch a
- 15 maintenance crew.
- In addition, we're looking at other systems to do some
- 17 redundant checking, one by a manufacturer that basically counts
- 18 the wheels, so to speak, of the trucks that cross certain segments
- 19 of the track and through our control centers. So it would be a
- 20 real time detection system and that would be first. And we're
- 21 also working on a redundant backup system.
- 22 HEARING OFFICER DOBRANETSKI: Okay. Would this testing
- 23 be done while you're in service or when you're not in service?
- 24 MR. CATOE: Twenty-four hours, whenever we're in
- 25 operation, the real time detection system is a full-time

- 1 computerized system that will tell us what's happening.
- 2 HEARING OFFICER DOBRANETSKI: I understand that, but
- 3 your testing to determine that the system is doing what you want,
- 4 will that be done when you have revenue service or when you're
- 5 having non-revenue? In other words, late at night?
- 6 MR. CATOE: Again, it's my understanding it will be all
- 7 revenue service and I would assume some at night, but I have to
- 8 ask Dave Kubicek the specifics of the specs of that system.
- 9 HEARING OFFICER DOBRANETSKI: Mr. Kubicek?
- 10 MR. KUBICEK: We would first start out in a non-revenue
- 11 environment, you know, to validate the overall design and the
- 12 protocol. That would be on any system that we work on
- 13 implementing. Then the other next component would be the
- 14 monitoring of the system operation during, you know, revenue
- 15 periods, revenue time frames, but as far as its integration into
- 16 the overall train network, that would be a stepped and staggered
- 17 process. We would systematically go through each respective area.
- 18 For example, Mr. Catoe referenced like a loss of shunt tool.
- 19 One of the things that we have done or are in the
- 20 process of doing is that once you get the program working, then
- 21 you start going through and then you start establishing known
- 22 faults on purpose to ensure that this system does have the
- 23 intelligence to pick up variables. I think it's most prudent on
- 24 our part. It takes longer to do that. A lot of times people have
- 25 the tendency to rush, say, oh, we've got something that works, but

- 1 I'm of the mindset that we want to test this thing as robustly as
- 2 we can and part of that is I guess you could say self-inflicted
- 3 design flaws to make sure that the system is communicating
- 4 properly and -- until that is, you know, rectified, and it has to
- 5 be done in various conditions, various alignments, various stages
- 6 of our equipment. So that would be one of the processes that
- 7 would be done and is being done.
- 8 HEARING OFFICER DOBRANETSKI: And your goal is to have
- 9 this ready by when?
- 10 MR. KUBICEK: Our goal for the loss of shunt tool will
- 11 be towards the end of calendar year 2010. We've got another
- 12 revision that's going to be coming through in the April time frame
- 13 where the intelligence is going to be enhanced a little bit more.
- 14 Then we'll shift our focus more towards integrating it into our
- 15 operations control center where you start looking at impacting
- 16 your SKATA (ph.) system, the annunciation that's depicted in
- 17 there, the prioritization of the signaling that's in there. And
- 18 then also, you know, a very important component on our part are
- 19 actually two. There's going to be one, the notification inside
- 20 the train control room -- I'm sorry, the operations control
- 21 center, but then also how do we get that information to our
- 22 engineering and our field techs to respond in that area as well.
- 23 HEARING OFFICER DOBRANETSKI: So you're a year or more
- 24 away from return to automatic operation?
- 25 MR. KUBICEK: At this time for the loss of shunt, that

- 1 is correct. There is still another component as far as it goes to
- 2 these hearings and stuff about what we have to do as far as the,
- 3 you know, potential failure that caused the June 22nd incident.
- 4 That in itself has to be addressed in an entirely different
- 5 manner. So loss of shunt has one very strong effort, but also the
- 6 repairs or remediation that we need to do to our current
- 7 infrastructure, that has a separate parallel that we must evaluate
- 8 and implement prior to as well.
- 9 HEARING OFFICER DOBRANETSKI: Okay. Thank you. I'll
- 10 yield to any more questions on that and save that for your next
- 11 panel.
- 12 Mr. Chairman, I've completed my questioning.
- 13 CHAIRMAN SUMWALT: Thank you, Mr. Dobranetski, and just
- 14 to clarify, when you asked WMATA for the damages, you mean the
- 15 property damage is what you're specifically asking for, I believe?
- 16 HEARING OFFICER DOBRANETSKI: Yes, for equipment
- 17 damages, property damages, exclusive of any suits.
- 18 CHAIRMAN SUMWALT: Thank you. Dr. Benjamin, you stated
- 19 on a local interview after the February 12th DuPont Circle
- 20 derailment that, and I quote here, "We have a culture that is not
- 21 sufficiently focused on safety as a way to live and to operate."
- 22 What did you mean by that statement?
- MR. BENJAMIN: Mr. Sumwalt, we are in a situation in
- 24 which a whole series of accidents have occurred which may or may
- 25 not include the one at DuPont Circle or the June 22nd accident,

- 1 but a series have occurred, where when you look at the accident,
- 2 it appears that errors may have been made, and it may have been
- 3 related to people not paying attention to safety. In order for
- 4 safety to truly work in an organization, I believe the entire
- 5 organization needs to be dedicated to safety. The entire
- 6 organization needs to be thinking about safety in every action
- 7 that it takes. The entire organization needs to worry at all
- 8 times about whether whatever action its going to take will in fact
- 9 enhance or detract from safety. That's a culture situation, and
- 10 it's one that we really need to work on and I believe is very
- 11 difficult to work on. That's why we've asked for help from the
- 12 U.S. Department of Transportation, from APTA and from AFL-CIO.
- 13 CHAIRMAN SUMWALT: Well, thank you. Thank you for your
- 14 candor. We have a panel on the last day, and I'm sorry you won't
- 15 be able to be here because you have a WMATA board meeting, but
- 16 we'll have a panel on high reliability organizations, and one of
- 17 the characteristics of a HRO is an organization that is
- 18 preoccupied with failure. They are so always looking out for the
- 19 things that can bite them.
- 20 You said a little while ago that safety culture starts
- 21 at the bottom and works its way up. I've always looked at it the
- 22 other way around, that it has to start at the top and permeate
- 23 through the entire organization. So maybe just different ways to
- 24 look at it, but any comments on that statement?
- MR. BENJAMIN: Well, I can certainly see it in both

- 1 ways, mainly because it's got to be everywhere. It's got to be at
- 2 the top. It's got to be at the bottom. The important thing that
- 3 I believe is safety is not something that you hold the general
- 4 manager to. Safety is something that occurs for every single
- 5 employee throughout the organization. So it's not a set of
- 6 reports. It's not a set of personnel evaluations, all of which
- 7 are important elements. It's the attitude of the people, and that
- 8 from my view is the bottom. Now, whether it starts at the top or
- 9 the bottom, I guess we can discuss, but it's got to be everywhere.
- 10 CHAIRMAN SUMWALT: Indeed. Would you include -- you
- 11 said it doesn't just encompass the general manager or somebody
- 12 else. Would you say that it also must include the board of
- 13 directors?
- MR. BENJAMIN: Absolutely.
- 15 CHAIRMAN SUMWALT: And you stated several times during
- 16 the morning and into the afternoon that the WMATA board is a
- 17 policy board, but does the board also provide oversight?
- MR. BENJAMIN: It provides oversight in the context that
- 19 it certainly reviews issues that are brought to it. It reviews
- 20 data that are brought to it, and based upon those, establishes
- 21 policy or broad direction for the general manager and the staff of
- 22 the agency.
- 23 CHAIRMAN SUMWALT: Okay. Thank you. I'd like to call
- 24 up Exhibit P1-1, and this is the procedures for the WMATA board of
- 25 directors which was apparently just modified January 28, 2010.

- 1 And there it is. It's now projected out into the audience and on
- 2 the Internet. And in the opening statement here, it says, and
- 3 I'll read it, "The WMATA board of directors determines agency
- 4 policy and provides oversight for the funding, operation and
- 5 expansion of transit service within the transit zone."
- Now, I've heard several times from various members of
- 7 this panel, that safety is a top priority of WMATA, but
- 8 conspicuously absent to me is the mention of safety in this
- 9 preamble, the role of the WMATA board of directors. So what can
- 10 you say about that?
- 11 MR. BENJAMIN: I certainly believe that the inherent
- 12 importance of safety is in all three of the areas that are brought
- 13 up there. We always have maintained in making decisions about
- 14 funding that we will never not fund safety. Safety will always be
- 15 the highest priority. It will always be funded.
- 16 Now, the same I think I can say about operation.
- 17 Operations must be safe, and we always maintain that whatever
- 18 needs to be done to ensure the safety of our employees, of our
- 19 customers, of the general public, must be done as part of
- 20 operations. And as the system is expanding, the construction of
- 21 that system, the rehabilitation of the system, all of those items
- 22 must be done with safety in mind. So I think safety pervades all
- 23 of these areas as opposed to being a separate one.
- 24 CHAIRMAN SUMWALT: But if it pervades throughout, and if
- 25 it's that important and if the WMATA board had the opportunity to

- 1 update these, to revise them on January 28th, which was seven
- 2 months after the largest accident in WMATA's history, why was
- 3 safety not that important, that whoever redrafted this document,
- 4 that it was not in there?
- 5 MR. BENJAMIN: Well, I will take responsibility for
- 6 that. I was the person who redrafted this document and made a lot
- 7 of changes in the document in terms of how we might operate and
- 8 changes that we might make in the way we operate. And very
- 9 honestly, I did not pay an awful lot of attention to this role of
- 10 the WMATA board and say what really are the extremely important
- 11 parts of this. I would say again that I think safety is inherent
- 12 in all of these things, but certainly would not have objected had
- 13 somebody said to me, you're ignoring safety in these statements;
- 14 you ought to put that in, and I would have said, of course.
- 15 CHAIRMAN SUMWALT: Okay. Thank you for your candor
- 16 again. So describe to me the methods in which the WMATA board
- 17 does provide safety oversight?
- MR. BENJAMIN: Well, again, one of the things that we do
- 19 is we have a committee that on a regular basis receives reports on
- 20 broad statistics related to safety from the staff. They also
- 21 receive reports about any audit where there's significant issues,
- 22 any accident or incident where there are significant issues, and
- 23 reviews those things in the context of do we need to change our
- 24 broad policy about safety? Are there areas where we need to
- 25 provide emphasis? One of those examples is the discussion that I

1 gave earlier about how we are reaching out now to find additional

- 2 help from other sources to deal with our culture issue.
- 3 CHAIRMAN SUMWALT: Thank you. I want to come back to
- 4 the safety committee in just a moment, but you had indicated that
- 5 at one point, years ago, I suspect, that the WMATA board had been
- 6 criticized for micromanaging and now the board has gotten away
- 7 from that and allowed the people that you've hired to do their
- 8 jobs, which is, frankly, not a bad management philosophy, hire the
- 9 best people you can and then get out of their way. But is it
- 10 possible that the pendulum has swung from being micromanaging to
- 11 now being so far on the other side to where the board is not
- 12 engaged in looking and measuring and evaluating those things that
- 13 are truly important to them, such as safety? Is that possible?
- 14 MR. BENJAMIN: It's certainly possible. I can never
- 15 deny that possibility.
- 16 CHAIRMAN SUMWALT: Thank you. I don't think I'll even
- 17 call up this exhibit, but one of your committees -- and this has
- 18 been asked, something along these lines, before -- Customer
- 19 Service, Operations and Safety Committee, and I want to ask you,
- 20 is it optimal from a safety perspective to have a committee that
- 21 looks at safety but also looks at customer service? And as I
- 22 think we both recognize, there's this age-old conflict between
- 23 production and safety. And I noticed last week by listening to
- 24 last week's audiocast of the Customer Service, Operations and
- 25 Safety Committee meeting, there were comments that safety measures

- 1 since the safety measures taken since the June 22nd accident,
- 2 things have -- and I think it might have been you that asked the
- 3 question -- there have been things that have affected operational
- 4 performance because of manual mode and belling (ph.) of the 1000
- 5 cars and absolute walk and stopping at the ends of the platforms,
- 6 that performance measures such as on-time performance have slid
- 7 from your goals of being in the 90s down into the high 80s. So my
- 8 question is, by having customer service and safety in the same
- 9 committee, does this present a potential conflict by requiring
- 10 that committee to balance safety and customer service?
- 11 MR. BENJAMIN: I think that balance is exactly the kind
- 12 of policy position that a board should be taking and exactly the
- 13 kind of issue on the broad basis that a policy board should be
- 14 dealing with and struggling with, and I think you've just given
- 15 one of the excellent reasons why those two should be together.
- 16 And, yes, I was one of two people who raised the issue, certainly
- 17 in the context of some of the things that we have been observing.
- 18 Should we be looking at our service levels? Should we be looking
- 19 at a decline in the quality of our service? And are those related
- 20 potentially to the fact that we're in manual operation as opposed
- 21 to automatic? That same issue applies to some safety concerns.
- 22 There are some things that can happen in manual that cannot happen
- 23 in automatic, and what we're asking our staff to do is please go
- 24 back, look at it again. You know, right away when this accident
- 25 occurred, one of the first things we did is say, well, we have an

- 1 unknown here. We have a real problem here. We need to move
- 2 quickly to ensure the safety of our passengers.
- I think it's worthwhile periodically to go back and
- 4 relook at that, review the information, say has the world changed
- 5 since that time? Is that balance different? Are we at the point
- 6 where we've had additional incidents that might say, well, perhaps
- 7 we should be looking at automatic operation and perhaps it will do
- 8 more than just provide more reliable service. It may even enhance
- 9 safety. And all we did was say, would you please look at that?
- 10 CHAIRMAN SUMWALT: I come from the mindset based on this
- 11 agency that I represent, the NTSB, I come from the mindset that
- 12 the NTSB is an independent federal agency. We don't report to the
- 13 DOT. Congress specifically moved us out in the Independent Safety
- 14 Board Act of 1974 to avoid any conflict of interest or perceived
- 15 conflict of interest with safety, to pull it out and make it an
- 16 independent agency. And in the case of WMATA, again, there is
- 17 going to be that constant tension. Maybe the full board needs to
- 18 balance that. In fact, the full board has to balance finances and
- 19 customer service and everything else, but here on this committee,
- 20 the committee itself, is trying to balance that, and so by the
- 21 time it gets to the full committee, perhaps it's been filtered
- 22 down. I'm not going to tell you how to run your business, but
- 23 that is something that did catch my eye and so I wanted to raise
- 24 the question to see how you would answer it.
- 25 MR. BENJAMIN: It's certainly worthy of consideration.

- 1 Thank you.
- 2 CHAIRMAN SUMWALT: Thank you, sir. I'd like to now pull
- 3 up Exhibit P1-o, P1-o. This is, of course, that committee,
- 4 Customer Service, Operations and Safety Committee meeting. This
- 5 was from three days after the accident, and I'd like to just
- 6 scroll through the slides. Let's scroll down to the very first
- 7 slide. Yes, that's where I want to be. So keep going down and,
- 8 yes, if we can look just a little bit -- yes, that's where I want
- 9 to look. Just scroll that one down a little bit and make it so we
- 10 can read the full screen. The areas that I'm going to ask
- 11 about -- let's scroll up because we're -- right there is where I
- 12 want to look.
- The gist of the questions that I'm going to ask is, is
- 14 the WMATA board looking at the right things? Are they looking at
- 15 the right metrics? For example, under safety initiatives for
- 16 rail, it says Metro continues to educate the public using
- 17 prerecorded safety announcements played over the intercom. And it
- 18 also says Metro has enhanced the investigation techniques for
- 19 supervisors and managers. So here it appears when we talk about
- 20 investigative techniques, and Mr. Catoe or Chief Taborn, you were
- 21 not the chief safety officer at the time, but when we talk about
- 22 investigative techniques, what are we referring to there?
- 23 CHIEF TABORN: Relative to this particular presentation
- 24 before the board, what is usually the practice is that that
- 25 presentation is developed approximately a month before the actual

1 delivery of that. So that was done in the May time frame, if I'm

- 2 not mistaken.
- 3 CHAIRMAN SUMWALT: Okay. So when we say enhanced
- 4 investigative techniques, are we talking about basically, and I
- 5 don't want to diminish this because we don't want anybody slipping
- 6 and falling in a Metro Station, but it appears to me that what
- 7 we're really focused on here is preventing slips and falls and
- 8 investigating those sorts of things in stations and elevator
- 9 injuries and escalator injuries, but we're not worried about rail
- 10 safety per se, about derailments and collisions and things of that
- 11 sort. Would you agree with that, Chief?
- 12 CHIEF TABORN: No, sir. I think what this is saying is
- 13 that there are measures that are being taken to investigate the
- 14 causes of a variety of different problems, whether that be in
- 15 rail, track or a number of ways and that is the enhanced
- 16 investigative techniques that has been afforded to the employees
- 17 that they can get to the heart of the matter.
- 18 CHAIRMAN SUMWALT: Okay.
- 19 CHIEF TABORN: I think that's what they're talking
- 20 about.
- 21 CHAIRMAN SUMWALT: Thank you. But the first one is
- 22 clearly dealing with it. It's under rail safety, that it talks
- 23 about Metro continues to educate the public using prerecorded
- 24 safety announcements played over the intercom. I'm not sure that
- 25 that, as a NTSB investigator, that's what I'm really looking for

- 1 there. But what I'm trying to ask, is the board looking at the
- 2 right things? And there's other slides that we'll look at here in
- 3 just a moment. So I'll tell you what, let me go through the rest,
- 4 and then, Dr. Benjamin, you can answer that, if that's all right.
- 5 MR. BENJAMIN: That would be fine.
- 6 CHAIRMAN SUMWALT: Great. Thank you. Now, let's scroll
- 7 down a couple of slides. We're going to talk about improper door
- 8 operations. So again, this is in the safety presentation and so
- 9 we're worried about doors being opened prematurely on the 8-car
- 10 trains, I think is what we're talking about.
- Now, let's go down to Appendix A where we get into the
- 12 rail safety performance indices, and this is what I want to look
- 13 at here. Clearly rail passenger injuries is something that anyone
- 14 would want to be looking at, rail transit facility occupant
- 15 injuries. So this is in station and parking facilities. So
- 16 again, this is not preventing train accidents. This is just
- 17 talking about people falling down and slipping in a Metro Station.
- 18 Then we have escalator injuries. Again, that's an industrial sort
- 19 of an injury.
- Now, we do have derailments which is truly a safety
- 21 concern for the operation of the rail portion. We have fire
- 22 instance and smoke instance. The reason I'm asking this, I looked
- 23 at the BP Texas City Oil Refinery accident report, the largest
- 24 industrial accident in this country in decades, and in that, the
- 25 Chemical Safety Board, which is set up like us, like the NTSB,

- 1 pointed out that BP was looking at industrial safety measures and
- 2 not production safety measures. They were very focused on
- 3 eliminating loss workday cases and eliminating slips and falls.
- 4 My question to you is, is WMATA looking at the right
- 5 things when it comes to trying to measure and predict rail
- 6 catastrophes? That's my question.
- 7 MR. BENJAMIN: Well, we certainly are open to
- 8 suggestions for things that we should be looking at as a board
- 9 other than the ones that we are. I would note that in the month
- 10 immediately following this, I think we also inserted rail
- 11 fatalities into our statistics. One of the focus area for the
- 12 board is exactly the one that I've been mentioning several times.
- 13 We want safety for our passengers. We want safety for our public.
- 14 We want safety for our employees, and this is oriented very
- 15 heavily towards that. It's towards our people being injured, our
- 16 employees being injured. What is going on out there that we need
- 17 to be paying attention to? If there are some other statistics
- 18 that help us focus on ways to avoid accidents other than things
- 19 like derailments, et cetera, that would be telltale indicators
- 20 that we could use to help derive policies, we'd be more than happy
- 21 to hear from you and we'll be certain to include those in our
- 22 reports.
- CHAIRMAN SUMWALT: Well, thank you. To be clear, I'm
- 24 not an expert on rail transit, but you all are. So, Mr. Kubicek,
- 25 what performance measures do you have in place to properly

1 anticipate things like the catastrophe on June 22nd? Give me

- 2 specific examples.
- 3 MR. KUBICEK: To begin the anticipation process, for
- 4 example, the loss of shunt tool that we're working on.
- 5 Beforehand, it was utilized on a monthly basis. Now it's been
- 6 increased to being done twice daily. Also the approach that if we
- 7 find a fault in our reviews, if it's warranted, we go into an
- 8 absolute block area, where we actually shut down a portion of the
- 9 railroad and we restrict the access or the operational mode
- 10 regardless of the impact, regardless of the time of day, to begin
- 11 to evaluate what is taking place out there. That is something
- 12 very hard, very deliberate, that has been imposed. We also are
- 13 working on, with the development of this loss of shunt tool, the
- 14 ability for it to have the intelligence to page our maintenance
- 15 and our engineering staff immediately whenever this thing detects
- 16 something. That is real time information that we're working off
- 17 of. Again, those are I think very substantial, very assertive
- 18 measures that's being taken on our part.
- 19 Also, part of this is that as we go through these
- 20 reviews, we look at the failures. We look at the failure types to
- 21 better understand what is actually influencing the systems out
- 22 there, because you can get notifications on various track circuits
- 23 that have nothing to do with the integrity of the track circuit,
- 24 but it must be thoroughly reviewed by our maintenance and
- 25 engineering staff.

- 1 CHAIRMAN SUMWALT: And to be clear, Mr. Kubicek, the
- 2 loss of shunt tool, was it in place at the time of the June 22nd
- 3 accident?
- 4 MR. KUBICEK: It was in place, yes, prior to June 22nd.
- 5 It's just that post-accident, we took it to a whole another level
- 6 and are continuing to evolve its effectiveness in our day-to-day
- 7 operations.
- 8 CHAIRMAN SUMWALT: Thank you. Back to Dr. Benjamin.
- 9 I'm interested in the management of change, and perhaps Mr. Catoe
- 10 as well can answer this. Between January of '06 and, say,
- 11 February of '07, there were essentially four general managers for
- 12 WMATA, two of those were interims, but there were a total of four
- 13 general managers. Would that be correct, Mr. Catoe?
- MR. CATOE: That is correct.
- 15 CHAIRMAN SUMWALT: So four over a 13-month period, and
- 16 by my calculations, there were five chief safety officers in the
- 17 last 2½ years. Is that correct, sir, Mr. Catoe?
- 18 CHIEF TABORN: Yes, sir.
- 19 CHAIRMAN SUMWALT: Or Chief Taborn, thank you. So what
- 20 I'm interested in, when we look at accidents, oftentimes we see
- 21 that there's widespread turnover in senior management. So how has
- 22 the WMATA board effectively managed that change to ensure that
- 23 safety was properly managed during that change period?
- 24 MR. BENJAMIN: If you're talking about the period prior
- 25 to 2007, I must admit that I was not a member of the board at that

- 1 time.
- 2 CHAIRMAN SUMWALT: I understand.
- 3 MR. BENJAMIN: I joined the board in 2007, and I left
- 4 the staff in 2005. So there's sort of a blank in my knowledge
- 5 there between 2005 and 2007. I don't know what the board did or
- 6 did not do during that period. I do know that right now one of
- 7 the major concerns of our current board is to maintain stability
- 8 among the staff and to maintain stability in our overall
- 9 management structure in order to allow us to have an interim
- 10 general manager who can focus on some of these issues and bring in
- 11 a permanent general manager who will then be able to move on more
- 12 substantial change in a consistent fashion. And we are very
- 13 concerned right now that we have the management people in place
- 14 and trying to hold them in place for the time being until we can
- 15 move ahead with the results of all of these efforts that we're now
- 16 carrying out, not the least of which is to find a new leader.
- 17 CHAIRMAN SUMWALT: Thank you. Dr. Benjamin, are you
- 18 aware that the NTSB issued three recommendations to WMATA in July
- 19 and September, two of which were classified by the NTSB as urgent?
- MR. BENJAMIN: Yes
- 21 CHAIRMAN SUMWALT: And in general terms, are you
- 22 familiar with the content of those?
- MR. BENJAMIN: Yes.
- 24 CHAIRMAN SUMWALT: Okay. That's good. I know you can
- 25 pick it up and read it, and there's a reason for my asking that.

- 1 Mr. Catoe and Chief Taborn, has the WMATA management kept the
- 2 WMATA board appraised of the developments in this investigation,
- 3 including the NTSB's urgent safety recommendations?
- 4 CHIEF TABORN: Yes, sir, we have.
- 5 MR. CATOE: Yes, sir, we have.
- 6 CHAIRMAN SUMWALT: And the reason I'm asking, in
- 7 listening to the audiocast of last Thursday's Customer Service,
- 8 Operations and Safety Committee meeting, the immediate past
- 9 chairman of WMATA's board, the chairman who was the chairman while
- 10 the accident occurred, indicated that he was unaware that NTSB had
- 11 ever issued such urgent recommendations to WMATA. And so I'm
- 12 asking you, Chief Taborn, has there been some kind of a change in
- 13 the notification procedures for WMATA's board with this new
- 14 chairman coming in?
- 15 CHIEF TABORN: No, sir. With regards to sharing
- 16 information with our board of directors, I think through channels,
- 17 we have provided the members with that information that spoke to
- 18 those urgent recommendations in an e-mail.
- 19 MR. BENJAMIN: And I believe it was also the topic of a
- 20 discussion in one of our Customer Service, Operations and Safety
- 21 meetings. It was publicly discussed.
- 22 CHAIRMAN SUMWALT: Okay. Because I was just perplexed
- 23 how the chairman, the person who was the chairman at the time of
- 24 the accident, would not realize, given the gravity of this
- 25 situation, that there had been recommendations issued. So I

- 1 wanted to make sure that there was a good flow of information
- 2 between the general manager, the chief safety officer and the
- 3 board of directors.
- 4 MR. BENJAMIN: I guess the comment I can make is that
- 5 they can always talk at us and sometimes we don't quite hear it
- 6 all. But I think most of us hear most of it most of the time.
- 7 which is a very important characteristic of a board.
- 8 CHAIRMAN SUMWALT: I think it would be an understatement
- 9 to state that WMATA is facing a budget crisis. I think it's,
- 10 what, \$40 million for the current year, and I believe you said,
- 11 Dr. Benjamin, \$181 million forecast for next?
- MR. BENJAMIN: Actually 189, and probably given the
- 13 snowstorm, the \$40 million is higher now.
- 14 CHAIRMAN SUMWALT: That's encouraging. I'm wondering
- 15 this, and you've been very candid and I appreciate that candor,
- 16 and these are just questions that I ask, that I wonder. Is it
- 17 possible when you're facing that sort of a budget crisis, that
- 18 perhaps the focus of the board has slightly moved from the safety
- 19 role to really concentrating on this financial crisis? I'd like
- 20 to know you comments on that.
- MR. BENJAMIN: Well, we face a financial crisis every
- 22 year. Every year when the general manager brings us a budget,
- 23 there is a shortfall, and every year we have to focus on what we
- 24 can do about that. This one is substantially more severe than has
- 25 been the case in the past primarily due to the economy, which

- 1 makes it much more difficult for us to deal with. But I don't
- 2 think that in the past we have forgotten the importance of safety
- 3 in the process of dealing with finance and those two, again, as I
- 4 mentioned before, are interrelated. We have to make sure as we
- 5 solve our budget problems that we don't do that at the expense of
- 6 safety.
- 7 CHAIRMAN SUMWALT: Thank you.
- 8 Mr. Kubicek, this question is directed to you. During
- 9 the 2007 triennial report, triennial safety and security review at
- 10 WMATA from TOC, they issued a finding related to WMATA's Roadway
- 11 Worker Protection Program, and finding number 10 says, and I
- 12 quote, "It appears that the Track Worker Protection Rule set forth
- 13 in Special Order 07-2 are being consistently violated and are not
- 14 properly enforced." And in the December 31, 2009 TOC report, the
- 15 one that was just completed, it's stated in the report, and I
- 16 quote, "TOC observed serious violations of WMATA's Roadway Worker
- 17 Protection Rules and Procedures and as such believes that WMATA's
- 18 RWP Program is not effective as it is currently written, applied
- 19 and enforced."
- 20 So what this tells me is in 2007, TOC found widespread
- 21 cases of not following procedures and then two years later, they
- 22 came back and found the same thing, "Procedural noncompliance in
- 23 this particular area is continuing to be a problem."
- 24 So talk to me about this. What does this mean?
- 25 MR. KUBICEK: Okay. The maturing of this process, when

- 1 they first initiated it, it was noted in a rule or procedure
- 2 called 07-02. That was the first effort that was put forth, you
- 3 know, I think post the Eisenhower incident, where they started,
- 4 you know, addressing this right-of-way protection. Then, you
- 5 know, you need time to train, to implement, to put out, evaluate
- 6 it. And then it looked like 07-02 wasn't working, you know, the
- 7 recommendations. That generated to an 07-06. You go through
- 8 this, you see what's taking place, and the model is not effective.
- 9 What I'm focused on at this stage, since it's apparent that based
- 10 on the criteria that's been established, we're going to have to
- 11 change our business process out there on the way that we conduct
- 12 our inspection teams. For example, there's a lot of traffic out
- 13 on our railroad towards our off peak period is busier than a lot
- 14 of peak periods of other railroads that are ran in the industry.
- 15 Whenever you have that much work that is taking place and you have
- 16 an operational environment, we really have to adjust our protocol
- 17 and, for example, you have all of these different locations.
- So one of the things that I've started discussing with
- 19 my staff and to start looking at a different pilot, is to start
- 20 creating more of a centralized track walker inspection where we
- 21 established larger zones. It just has to be a totally different
- 22 philosophy for us to, one, keep up with the maintenance, but we've
- 23 had two revisions of working with individuals, getting insight
- 24 from the Tri-State Oversight, from our employees and the FTA, and
- 25 there's a point in time that says at the time it was a good idea

- 1 to implement what we had, but we have to take it to the next step,
- 2 and part of that is going to be that we run and operate our
- 3 railroad.
- 4 And on my part, working at other transit authorities,
- 5 you know, I can honestly say, that this is a very busy and
- 6 aggressive railroad. There are duty cycles out there that are
- 7 incredible, and we are going to have to adjust our maintenance
- 8 philosophy to match that and we've got to build a structure that
- 9 our individuals and our staff can be successful in.
- 10 CHAIRMAN SUMWALT: Well, you said you've got to adjust
- 11 your maintenance philosophy. And it's a question, is what you
- 12 really need to do is adjust your culture so that people comply
- 13 with the procedures?
- 14 MR. KUBICEK: Absolutely. I mean, again, I call it a
- 15 business process because we have maintenance folks out there. We
- 16 have transportation folks out there. We have other customers out
- 17 there. It is approaching it in a totally different philosophy
- 18 towards we're focused on our business in a different way.
- 19 CHAIRMAN SUMWALT: In the past, when we see widespread
- 20 procedural noncompliance in other investigations this agency has
- 21 looked at, it is oftentimes an indicator of an unhealthy safety
- 22 culture, and that's what I'm looking for, is that you had
- 23 noncompliance -- and we're just looking at one part of your
- 24 operation. We're just looking at your Roadway Worker Protection
- 25 Program. We're seeing widespread noncompliance in that one area.

1 Well, I go -- and I don't have a lot of evidence of

- 2 widespread noncompliance in other areas, because I'm not out
- 3 riding the rails. But I go and I look in this very accident, and
- 4 although it may or may not have had anything to do with the
- 5 accident, the operator of the train that was struck had a history
- 6 of noncompliance and, in fact, had even after having been
- 7 counseled, continued to want to operate the trains in manual even
- 8 though he had been counseled to operate the train in ATO. Is that
- 9 your recollection of it?
- 10 MR. KUBICEK: Yes, sir.
- 11 CHAIRMAN SUMWALT: Thank you. So here's a couple of
- 12 cases. I mean, all I've done is flipped through a file, and I
- 13 say, wow, here's another case of noncompliance. I pick up other
- 14 accident reports that we've looked at and say, well, here's a case
- 15 where Mt. Vernon Square, where the operator, WMATA did not have
- 16 the proper procedures in place for wheel truing. These tend to
- 17 point, and other accidents that I've looked at, towards a poor
- 18 safety culture. It's not that you have to go out and adjust your
- 19 Worker Protection Program; it's that you've got to recalibrate the
- 20 entire organization.
- 21 So while I'm talking about safety culture, Mr. Kubicek,
- 22 how would you define safety culture?
- 23 MR. KUBICEK: Safety culture, it's the awareness of
- 24 everybody in the organization of your surroundings, on the way
- 25 that you conduct yourself, the way that you conduct your business.

- 1 It is your day-to-day work environment.
- 2 CHAIRMAN SUMWALT: Okay. And, Mr. Catoe, how would you
- 3 define it?
- 4 MR. CATOE: I would define it as to be aware of your
- 5 everyday surroundings from a safety perspective, and to look out
- 6 for the safety of yourselves, your coworkers and try to identify
- 7 either issues that might impact our operations.
- 8 CHAIRMAN SUMWALT: Thank you. And Chief Taborn?
- 9 CHIEF TABORN: I would think that it would mean an
- 10 organization or an agency that focuses on avoidance of risk, and
- 11 by doing that, that is the way that they live or that we live. It
- 12 is to avoid risk that may cause harm to ourselves or others.
- 13 CHAIRMAN SUMWALT: Okay. And, Mr. Kubicek, how do you
- 14 rate the safety culture of WMATA? Is it good, bad, poor,
- 15 indifferent? How would you rate it right now or at the time of
- 16 the accident?
- MR. KUBICEK: I would rate it on my part that there are
- 18 a lot of good folks out there that are very concerned about
- 19 safety, but it is not all the way throughout the organization.
- 20 And there are some concerns out there. Again, it's not to
- 21 negatively reflect against any of the individuals because there
- 22 are a lot of truly great people in this organization, but we have
- 23 got to figure out how to get rid of these isolated cases that seem
- 24 to be continuing to plague our issues, and that's why I've made
- 25 reference on my part as far as a business model, as well as, you

- 1 know, you've noticed about the safety culture, it's not the
- 2 majority of our folks out there, but there is a group out there
- 3 that we've got to figure out how to reach down and get a hold of.
- 4 And it's not just in one particular area; it runs throughout the
- 5 spectrum of our organization.
- 6 CHAIRMAN SUMWALT: Thank you. Now, I want to know, do
- 7 you have what I would consider to be a reporting culture? Do you
- 8 have in place -- and this is to Mr. Kubicek, do you have a culture
- 9 where employees will freely report safety concerns?
- 10 MR. KUBICEK: Yes, I do. As well as I am also known to
- 11 go out to actual work sites, locations. I have an open door
- 12 policy.
- 13 CHAIRMAN SUMWALT: And throughout the organization, does
- 14 that exist?
- MR. KUBICEK: Yes, sir.
- 16 CHAIRMAN SUMWALT: Do you have an atmosphere of trust in
- 17 the WMATA organization?
- 18 MR. KUBICEK: I'm not going to say 100 percent. I do
- 19 think that there are some people that are probably more
- 20 comfortable with others, but that's just part of the ongoing
- 21 initiative to change the perception and approach of what we're
- 22 dealing with.
- 23 CHAIRMAN SUMWALT: And, Mr. Catoe, do you have a non-
- 24 reprisal policy signed by you or other senior officers where you
- 25 state that WMATA will not use a reporting system, or whatever it

- 1 is you have in place, to initiate disciplinary procedures against
- 2 an employee who disclosed in good faith a hazard or occurrence
- 3 involving safety which is the result of conduct that is
- 4 unintentional and not deliberate? Do you have anything like that?
- 5 MR. CATOE: We do have a policy concerning protecting
- 6 employees to bring issues up to the management of the
- 7 organization. But I have a personal policy, and I've communicated
- 8 this, that if an employee contacts me about a safety issue and if
- 9 there's an event that happens or the manager takes action against
- 10 that employee for reporting it to me, then that manager's going to
- 11 lose their job, and I've communicated that throughout the agency.
- 12 CHAIRMAN SUMWALT: Thank you. Mr. Kubicek, do you feel
- 13 that WMATA has a punitive culture where if someone goes out and
- 14 commits, say, a "honest mistake," are you going to punish those
- 15 people or how do you deal with those? Somebody has an honest
- 16 mistake, they report it to you. What do you with that employee?
- MR. KUBICEK: What I can comment on is whenever I first
- 18 got here, there was a lot of perception that there was a very
- 19 punitive environment. In my short time here, I've brought in a
- 20 lot of different management, a lot of different approaches.
- 21 People do make honest mistakes. That is something that takes time
- 22 to establish and put forth. At the same point in time, there also
- 23 needs to be a culture established that there is accountability by
- 24 everybody at every level. So I'm not going to say from my
- 25 perspective on the way that I approach, you know, my business, is

- 1 it a punitive environment? There are pockets that probably still
- 2 exist there that are going to be changed over time, but it's not
- 3 the direction that we want to end up at.
- 4 CHAIRMAN SUMWALT: All right. Can you give me a
- 5 specific example, not a hypothetical, but a specific example, of
- 6 when you had someone to commit "an honest mistake," they reported
- 7 it to you in good faith, and you did not punish them? You may
- 8 have given them additional training or something like that, but
- 9 you did not punish them. Can you give me a specific example of
- 10 that?
- 11 MR. KUBICEK: Yes. I had an individual that was
- 12 operating a respective piece of track equipment, and they had a
- 13 failure and basically they were very honest in their assessment of
- 14 what was taking place and about the consequences of what it
- 15 generated. And I did not take any action because there were
- 16 circumstances, one, that were outside of their control, but also
- 17 their honesty and forthright helped the investigation that much
- 18 more, which in turn changed the way that we approach some of our
- 19 business models.
- 20 CHAIRMAN SUMWALT: Thank you very much.
- Mr. Catoe, are WMATA managers, senior management,
- 22 midlevel managers, are they compensated or otherwise rewarded for
- 23 production that may possibly conflict with safety? For example,
- 24 do managers get bonuses for performance measures such as on-time
- 25 performance, system reliability, lower workday, lost workday

- 1 cases?
- 2 MR. CATOE: That's part of the review process, but
- 3 there's no bonus system that I have for that. I have a reverse
- 4 one which I have executed in the time period that you mentioned.
- 5 If a high level manager is not performing and there are safety
- 6 issues that are repetitive within their area of responsibility,
- 7 then there is a punitive action that I take.
- 8 CHAIRMAN SUMWALT: Thank you. Mr. Catoe, in a question
- 9 that Mr. Klejst asked, you stated that the board is provided with
- 10 a great deal of information and my question is, is it the right
- 11 information? And I guess that's a very broad question but that's
- 12 the million dollar question.
- 13 MR. CATOE: I think it's the right information. Can
- 14 there be additional information? Based upon some of the
- 15 discussions here today, based upon some of the changes that we've
- 16 made in our reporting to the board, obviously in time you find
- 17 that additional information needs to be given to them to focus on
- 18 the issues that will really have an impact on the agency.
- 19 CHAIRMAN SUMWALT: Thank you. And this is what
- 20 everyone's wanted to hear about three hours. This is my final
- 21 question. And this will be to Dr. Benjamin. You stated that
- 22 early on, it seems like yesterday, but it was this morning, that
- 23 the WMATA board looks at issues that are elevated to the board by
- 24 the general managers or issues that come to your attention through
- 25 other means such as the inspector general, but I believe you said

- 1 that the inspector general typically does not bring information to
- 2 the board. So my question is, how does the WMATA board ensure
- 3 that they, the board, is looking at the relevant things? And we
- 4 had a conversation that how do you know that you're not being
- 5 isolated? How do you know, and this is not a direct attack on the
- 6 general manager, but in a theoretical situation, how would you
- 7 know that the general manager is providing you with the right
- 8 information or not hiding information? And you said, Dr.
- 9 Benjamin, well, we have means to find out eventually. But, the
- 10 question is should there be a formal method, a formal methodology
- 11 to ensure that you are getting the right information?
- 12 MR. BENJAMIN: Well, Mr. Sumwalt, first of all, let me
- 13 note, one of the things that does happen is, the inspector general
- 14 does report directly to the board and does make available to the
- 15 board inspector general hotline reports and the responses of that.
- 16 So if there are issues where staff have brought something to the
- 17 attention of the inspector general and that is the kind of thing
- 18 that the board does need to be apprised of, that is part of the
- 19 job of the inspector general.
- It's always difficult to know what it is you don't know.
- 21 That's always the most difficult part of any one of these
- 22 activities. I must admit there's several board members who are, I
- 23 think, very much like me. Now, I've been in a situation where
- 24 I've worked for the agency for many, many years. I know many
- 25 operators. I know many station managers. I know many mechanics.

- 1 I wander through the system on a regular basis. People talk to
- 2 me. Ms. Jeter over there is one of those sources of information
- 3 that goes to the board. All of those things allow us to hear
- 4 whether or not what's coming to us is what ought to be coming to
- 5 us.
- Now, does that mean we might not be missing something
- 7 that we should be paying attention to? There's no way for us to
- 8 be absolutely certain, but we have more than one channel of
- 9 getting information.
- 10 CHAIRMAN SUMWALT: Well, I thank you, and that's one
- 11 thing that I worry about as a board member, nobody talks to me.
- 12 When I was a frontline operator, I knew everything about an
- 13 organization, but the higher you get in an organization, the more
- 14 potential it is to become isolated --
- MR. BENJAMIN: Yes.
- 16 CHAIRMAN SUMWALT: -- and I just wanted to make sure
- 17 that WMATA had in place mechanisms to ensure that you were not
- 18 being isolated.
- 19 Are there any follow-ups from the Board of Inquiry?
- There are none. Okay. I know it's been a long
- 21 afternoon. We will come back at 4:25. We are in recess.
- (Off the record.)
- 23 (On the record.)
- 24 CHAIRMAN SUMWALT: Okay. We're back in session. Mr.
- 25 Dobranetski, are you ready to call the witnesses on the second

- 1 panel?
- 2 HEARING OFFICER DOBRANETSKI: Yes, I am.
- 3 CHAIRMAN SUMWALT: Please proceed.
- 4 HEARING OFFICER DOBRANETSKI: For the second panel, from
- 5 WMATA, Mr. Harry Heilmann, Mr. David Kubicek, Mr. Mike Hiller and
- 6 Mr. Alan Nabb. Gentlemen, would you rise to be sworn in?
- 7 (Witnesses sworn.)
- 8 HEARING OFFICER DOBRANETSKI: Thank you. Would you
- 9 please provide the correct spelling of your name, your current
- 10 employer, your title and company address please?
- 11 MR. HEILMANN: Thank you. The correct spelling of my
- 12 name is HEILMANN.
- 13 HEARING OFFICER DOBRANETSKI: Your current employer,
- 14 your title and your company address.
- MR. HEILMANN: I am currently retired. I reside at my
- 16 home address.
- 17 HEARING OFFICER DOBRANETSKI: Okay. I quess that will
- 18 do. When you were with WMATA, what were your duties and
- 19 responsibilities?
- 20 MR. HEILMANN: At the time of the accident, my title was
- 21 Assistant Chief Engineer and I was responsible for the automatic
- 22 train control technology in the engineering office.
- 23 HEARING OFFICER DOBRANETSKI: And how long were you the
- 24 assistant chief engineer?
- MR. HEILMANN: For five years, almost five years, four

- 1 years and change, since September of 2005.
- 2 HEARING OFFICER DOBRANETSKI: And could you provide a
- 3 brief descriptions of the positions you had held and other duties
- 4 you had?
- 5 MR. HEILMANN: When I first started working for WMATA,
- 6 in 1980, as a maintainer in the automatic train control systems.
- 7 I became a supervisor in automatic train control in 1983, worked
- 8 my way up to assistant superintendent of the automatic train
- 9 control maintenance branch, and then in 1999, I moved into the
- 10 engineering services for operations in automatic train control
- 11 functions and then in 2005, the assistant chief engineer position.
- 12 HEARING OFFICER DOBRANETSKI: Thank you. Mr. Kubicek,
- 13 for the record, will you give again your name, current employer,
- 14 your title and your company address?
- 15 CHAIRMAN SUMWALT: And if it's okay with you, Mr.
- 16 Dobranetski, we have that information on file for him, if that's
- 17 all right with you, sir.
- 18 MR. KUBICEK: That's fine.
- 19 HEARING OFFICER DOBRANETSKI: Mr. Hiller, would you
- 20 provide your full name, current employer, title and your company
- 21 address?
- 22 MR. HILLER: My full name is Michael E. Hiller. My
- 23 current title is Chief Engineer for Rail Operations Delivery
- 24 Vehicles and company address is 600 5th Street.
- 25 HEARING OFFICER DOBRANETSKI: And how long have you been

- 1 in your current position?
- 2 MR. HILLER: Twenty months.
- 3 HEARING OFFICER DOBRANETSKI: And your duties and
- 4 responsibilities?
- 5 MR. HILLER: My duties are to provide recommendations
- 6 for specification development for new equipment, recommendations
- 7 for development of modifications to existing rolling stock,
- 8 support engineering investigations as it's related to rolling
- 9 stock. That sort is kind of a birds-eye view.
- 10 HEARING OFFICER DOBRANETSKI: Okay. And how long have
- 11 you been employed by WMATA?
- MR. HILLER: Twenty-two years.
- 13 HEARING OFFICER DOBRANETSKI: And could you provide a
- 14 brief description of the positions you've held with WMATA during
- 15 this period?
- 16 MR. HILLER: I started with Washington Metro as a
- 17 maintainer, progressed through the ranks as a troubleshooter and a
- 18 journeyman maintenance technician on many of the systems on
- 19 vehicles. After graduation from the University of Maryland, with
- 20 a mechanical engineering degree, I was awarded the position of
- 21 vehicle engineer within the Vehicle Engineer Department, and I
- 22 worked there for approximately seven years until I was awarded the
- 23 position of chief engineer for rolling stock here at WMATA.
- 24 HEARING OFFICER DOBRANETSKI: Okay. Thank you. Mr.
- 25 Nabb, would you provide your full name, current employer, title

- 1 and company address?
- 2 MR. NABB: Alan G. Nabb, WMATA, Assistant General
- 3 Superintendent for Automatic Train Control and Communications
- 4 Maintenance, physically located at 3101 Eisenhower Avenue,
- 5 Alexandria, Virginia.
- 6 HEARING OFFICER DOBRANETSKI: And how long have you been
- 7 in your current position?
- 8 MR. NABB: Eighteen months.
- 9 HEARING OFFICER DOBRANETSKI: And what are your duties
- 10 and responsibilities?
- 11 MR. NABB: Provide day-to-day maintenance, both
- 12 preventative and corrective, of wayside ATC equipment, also
- 13 responsible for all of the maintenance of the various
- 14 communication systems with WMATA.
- 15 HEARING OFFICER DOBRANETSKI: And how long have you been
- 16 employed by WMATA?
- MR. NABB: Since September 2000.
- 18 HEARING OFFICER DOBRANETSKI: Could you also provide a
- 19 brief description of the various positions you've held with WMATA
- 20 and your duties and responsibilities in those?
- MR. NABB: Starting in September 2000, for three years,
- 22 I was a project manager for the Comprehensive Radio Communications
- 23 System Implementation. In May of 2003, I became the
- 24 Superintendent of Communications Maintenance, held that position
- 25 for five years, until assuming my current position.

- 1 HEARING OFFICER DOBRANETSKI: Thank you. Mr. Chairman,
- 2 the witnesses are qualified and we can turn the questioning over
- 3 to Mr. Ruben Payan.
- 4 CHAIRMAN SUMWALT: Thank you. Mr. Payan, go right
- 5 ahead.
- 6 MR. PAYAN: Thank you. My area of questions are going
- 7 to be within the confines of the automatic train control system.
- 8 I'll start out with Mr. Nabb.
- 9 Could you please define the responsibilities of the
- 10 track structure systems maintenance department?
- 11 MR. NABB: The specific responsibilities that I have
- 12 within the track structure systems maintenance is for all
- 13 preventative maintenance of the automatic train control system
- 14 that is wayside, do any necessary repairs of that equipment, in
- 15 other words, corrective maintenance, and assist with the
- 16 implementation of new equipment.
- 17 MR. PAYAN: Okay. Mr. Heilmann, I'll ask you the same
- 18 question, the responsibilities of the Engineering Support Services
- 19 Department?
- 20 MR. HEILMANN: The Engineering Support Services
- 21 Department, ATC engineers are responsible for providing technical
- 22 support for our maintenance and program management groups, so that
- 23 they can keep the equipment in a state of good repair. Also we're
- 24 responsible for the document control and master ATC technical
- 25 library, including design criteria and standard specifications.

1 We participate in the Rulebook Committee for rulebook revisions as

- 2 a subject matter expert. We're also responsible for evaluating
- 3 and approving changes to form, fit or function of the systems for
- 4 automatic train control, whether by internal staff or external
- 5 contractors and whether it's a permanent or temporary change.
- 6 MR. PAYAN: Okay. Thank you. Can I ask you to just --
- 7 a few inches closer to mic. I'm having a little bit of
- 8 difficulty.
- 9 Can you describe how engineering bulletins and ATC
- 10 technical procedure manuals are used by WMATA?
- 11 MR. HEILMANN: Yes. An engineering bulletin is a
- 12 notification of some important technical issue that the
- 13 maintenance staff needs to be apprised of. It can be informative
- 14 or instructional when it relates to safety. It's the quickest
- 15 method to get information to the maintenance staff, and we need to
- 16 do that before permanent documents can be revised. The
- 17 engineering bulletin, when it is produced, is provided to the
- 18 maintenance manager.
- 19 In the case of technical procedures, we use technical
- 20 procedures for maintaining equipment, troubleshooting the
- 21 equipment, periodic maintenance. The technical procedures, some
- 22 of them are periodic, and some are used in response to incidents,
- 23 for example, when we have a report that doors opened on the wrong
- 24 side on the platform. We have a particular test procedure that's
- 25 run in that platform on the wayside equipment to ensure that it's

- 1 working properly. That's not done periodically because it's a
- 2 hardwired system, and you're checking to make sure somebody didn't
- 3 tamper with the hardwiring.
- 4 Draft procedures are produced on technical procedures.
- 5 Draft procedures are produced by the engineers and then they're
- 6 submitted to the maintenance manager for field test trial to see
- 7 if they can be performed properly, make sure that the test
- 8 procedure is functional and that sort of thing. It comes back
- 9 with comments and then after the comments are incorporated, we try
- 10 another field trial. Once the field test procedure works in the
- 11 field, then we have it signed off by both the engineering manager
- 12 and the maintenance manager.
- In the case of the engineering bulletins, those are just
- 14 information being sent out to the field.
- 15 MR. PAYAN: Is there a formalized process to review new
- 16 or modified engineering bulletins by different department heads?
- MR. HEILMANN: No. The assistant chief engineer reviews
- 18 it before it's submitted to maintenance. That is the maintenance
- 19 branch. Every time an engineering bulletin came out from one of
- 20 the engineers, I would review it. Sometimes they came out from
- 21 me.
- 22 MR. PAYAN: Okay. Are you familiar with the American
- 23 Public Transportation Association's recommended practices for ATC
- 24 systems?
- MR. HETLMANN: Yes.

1 MR. PAYAN: How much quidance is provided by the APTA

- 2 recommended practices? Are they comparable to the FRA minimum
- 3 standards?
- 4 MR. HEILMANN: Yes, they're comparable to the FRA
- 5 minimum standards, but the FRA minimum standards are prescriptive.
- 6 They tell us what we must do, testing for safety, appliances
- 7 working properly and what period that they have to be tested and
- 8 how they have to be maintained. The APTA standards and
- 9 recommended practices are compiled by or were compiled by members
- 10 of APTA, including WMATA. We had people on staff to help compile
- 11 those. At the time they were produced and published in 2004 for
- 12 our signaling systems, WMATA standards were more stringent in most
- 13 cases. We do refer to the APTA standards in our procedures also.
- 14 MR. PAYAN: So other than by reference, how does WMATA
- 15 incorporate the APTA recommended practices into their maintenance
- 16 procedures?
- 17 MR. HEILMANN: When the maintenance procedure is
- 18 written, the functional elements of the APTA recommended practice
- 19 are incorporated into our procedure, and a reference is given in
- 20 our procedure to that APTA recommended practice.
- 21 MR. PAYAN: Does APTA review your procedures? Do they
- 22 approve them?
- MR. HEILMANN: No, they do not.
- MR. PAYAN: Okay. I'd like to get into the maintenance
- 25 inspection and testing procedures. Are you familiar with the

- 1 WMATA document "PMI 11000 High Frequency Track Circuit"?
- 2 MR. HEILMANN: Yes.
- 3 MR. PAYAN: Was this document in effect on the day of
- 4 the accident at Fort Totten?
- 5 MR. HEILMANN: Yes, it was, with one exception. There
- 6 was an engineering bulletin published on June 19 of 2005 that
- 7 required an additional test whenever verification is made that was
- 8 not included in that standard procedure.
- 9 MR. PAYAN: Okay. We'll get into the engineering
- 10 bulletin a little later. What is the PMI 11000 used for?
- 11 MR. HEILMANN: The PMI 11000 is used for periodic
- 12 testing of the GRS style track circuits, audio frequency track
- 13 circuits, and it also includes adjustment procedures in it for
- 14 adjusting that track circuit.
- MR. PAYAN: Using this PMI, the PMI 11000, what is
- 16 required to verify a track circuit? What procedure?
- 17 MR. HEILMANN: The purpose of the verification is ensure
- 18 that the track circuit detects, a soft shunt we refer to it, a
- 19 .060 ohm shunt located 10 feet inside of the transmitter end of
- 20 the track circuit, and that's what that procedure requires.
- 21 MR. PAYAN: One shunt inside?
- MR. HEILMANN: Yes.
- MR. PAYAN: At the transmitter end?
- MR. HEILMANN: I believe that's correct.
- 25 MR. PAYAN: Okay. Is there a form associated with this

- 1 document to document that test?
- 2 MR. HEILMANN: Yes, there is. There is a form at the
- 3 back of each one of our preventative maintenance procedures for
- 4 documenting the results of any tests.
- 5 MR. PAYAN: So somebody reviewing this form would know
- 6 how many shunts were used to verify this track circuit?
- 7 MR. HEILMANN: The form does not tell you how many
- 8 shunts to apply. The procedure itself does in a narrative form.
- 9 MR. PAYAN: Yes. But somebody reviewing this document,
- 10 the form, would know how many shunts were applied by reviewing the
- 11 test form, how many shunts were used?
- 12 MR. HEILMANN: I think I said no. They would know how
- 13 many shunts had been applied during the test by checkmark on the
- 14 form, yes.
- MR. PAYAN: Yes, that's --
- MR. HEILMANN: There's a checkmark on the form that
- 17 tells them that the shunt was applied.
- 18 MR. PAYAN: Okay. Are you familiar with the ATC system
- 19 integrity maintenance practice document?
- MR. HEILMANN: Yes, I am.
- 21 MR. PAYAN: Was this document in effect on the day of
- 22 the accident?
- MR. HEILMANN: Yes, it was.
- 24 MR. PAYAN: What instructions are provided by this
- 25 document?

- 1 MR. HEILMANN: It requires a single shunt 10 feet inside
- 2 the transmitter also for a double rail track circuit. That would
- 3 be in Part 10.3.
- 4 MR. PAYAN: Is this document superseding the PMI 11000
- 5 or is it working in accordance with 11000?
- 6 MR. HEILMANN: It's working in accordance with.
- 7 MR. PAYAN: Okay.
- 8 MR. HEILMANN: It's the same requirement.
- 9 MR. PAYAN: Yes. Okay. And moving onto the engineering
- 10 bulletin and ATC safety notice with the date of June 12, 2005.
- 11 Are you familiar with this?
- MR. HEILMANN: Yes, I am.
- 13 MR. PAYAN: Could you explain the purpose of this
- 14 bulletin?
- 15 MR. HEILMANN: This was an informative bulletin. The
- 16 incident that occurred on June 7, 2005 at the Rosslyn Station,
- 17 left us with oscilloscope signatures for the anomaly that we ran
- 18 into there, and those oscilloscope signatures were being presented
- 19 to the maintenance group in that informative bulletin.
- 20 MR. PAYAN: Okay. We'll talk a little bit more about
- 21 the Rosslyn incident later on, but basically my understanding is
- 22 this was an informative bulletin. It did not change any
- 23 procedures?
- MR. HEILMANN: That's correct.
- MR. PAYAN: Okay. The engineering bulletin and ATC

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- 1 safety notice dated June 19, 2005, are you familiar with that one?
- 2 MR. HEILMANN: There was instruction -- let me back up a
- 3 little on the June 12th. There was instruction included at the
- 4 end of that bulletin incase a maintainer found a problem, that
- 5 there was instruction for them to turn off a track circuit. So
- 6 there was some instruction included there.
- 7 I'm sorry. Repeat your question.
- 8 MR. PAYAN: Well, let me ask a follow-up.
- 9 MR. HEILMANN: Okay.
- 10 MR. PAYAN: Did the June 12, 2005 bulletin change the
- 11 instructions provided to the maintenance people as far as
- 12 verifying a track circuit?
- MR. HEILMANN: No, it did not change any instructions.
- 14 It added an instruction that if they found this anomaly, to take
- 15 some action.
- 16 MR. PAYAN: Okay. The June 19, 2005 engineering
- 17 bulletin and ATC safety notice, are you familiar with that one?
- 18 MR. HEILMANN: Yes, I am.
- 19 MR. PAYAN: What's the purpose of that bulletin?
- 20 MR. HEILMANN: The purpose of that bulletin was to
- 21 change the requirement immediately for shunt verifying track
- 22 circuits from rather than only one location 10 feet inside the
- 23 transmitter to two locations 10 feet inside the transmitter and in
- 24 the middle of the track circuit.
- MR. PAYAN: And what form was required for this to be --

- 1 for this test to be documented in?
- 2 MR. HEILMANN: Shunt verification of track circuits is
- 3 done whenever work is done on a track circuit, not only periodic
- 4 maintenance. So there wasn't any additional recordkeeping that
- 5 was indicated by the bulletin. It was just a requirement that it
- 6 be shunted in two places in order to perform a verification.
- 7 MR. PAYAN: Okay. Now, did the form being used have
- 8 enough space for two shunts to be documented, two checks to be
- 9 documented?
- MR. HEILMANN: Actually, the form did have a place for
- 11 two checkmarks but one of them was labeled RX or for a receiver,
- 12 and this is not what was required by the bulletin.
- 13 MR. PAYAN: Okay. So this engineering bulletin, the
- 14 June 19, 2005, that didn't supersede the PMI 11000; that
- 15 supplemented 11000?
- 16 MR. HEILMANN: Correct.
- 17 MR. PAYAN: Okay. Are you familiar with T181 track
- 18 circuit adjustment document?
- MR. HEILMANN: Yes, I am.
- 20 MR. PAYAN: What was the status of that document on the
- 21 date of the accident?
- MR. HEILMANN: The status of that document on the date
- 23 of the accident had a December '08 date on it, and at the time, it
- 24 was under a revision process. As I mentioned before, when we
- 25 draft a technical procedure, we provide it to the maintenance

- 1 manager for feedback after field trials, and that was the process
- 2 that we were in the middle of at the time of the accident, the
- 3 T181 and the T111 procedures, both of those for that case.
- 4 MR. PAYAN: So they were being finalized. They were,
- 5 like you said, getting feedback from the field?
- 6 MR. HEILMANN: Yes.
- 7 MR. PAYAN: Okay. And those two documents, T111 and
- 8 T181, could you explain what their purpose was?
- 9 MR. HEILMANN: Their ultimate purpose would have been
- 10 to, and I believe they're implemented at this time, but their
- 11 ultimate purpose was to supersede the PMI 11000 that you spoke of
- 12 earlier, and the T111, periodic maintenance procedure, was
- 13 requiring a shunt verification at three points on every track
- 14 circuit, three points on every audio frequency track circuit every
- 15 90 days.
- MR. PAYAN: Okay.
- MR. HEILMANN: I'm sorry. The 181, the T181 was a
- 18 procedure that took up the adjustment component of what was PMI
- 19 11000.
- MR. PAYAN: So the T181 in regards to verifying a track
- 21 circuit, what were the instructions or what referenced in that
- 22 document for verifying a track circuit?
- 23 MR. HEILMANN: In T181, since it's an adjustment
- 24 procedure, it requires that a test be performed after the
- 25 adjustment is completed and so it invokes T111.

1 MR. PAYAN: Okay. So those two documents kind of

- 2 complement each other?
- 3 MR. HEILMANN: Yes.
- 4 MR. PAYAN: Okay. Looking at my notes, I skipped an
- 5 area here. Are you familiar with the engineering bulletin dated
- 6 October 16, 2006?
- 7 MR. HEILMANN: I thought it was October 6th. I'm
- 8 familiar with one from October of 2006.
- 9 MR. PAYAN: You might be correct. What's the purpose of
- 10 that bulletin?
- 11 MR. HEILMANN: The purpose of that bulletin was to
- 12 advise maintenance staff that there was a compatibility issue that
- 13 had been looked at between the Union Switch and Signal impedance
- 14 bonds and the Alstom impedance bonds, and that they were deemed
- 15 compatible by the engineer who wrote the bulletin. He had
- 16 conferred with both Alstom and Ansaldo at the time to develop
- 17 that, and it gave additional procedures for shunt verification
- 18 after replacing a bond with a different type. The shunt
- 19 verification had to be performed in three places.
- 20 MR. PAYAN: So three shunts were now required and did
- 21 this document supersede PMI 11000 and the previous engineering
- 22 bulletin?
- 23 MR. HEILMANN: It spoke specifically to changing
- 24 manufacturer of equipment. So it didn't supersede the others. It
- 25 was for a particular case.

- 1 MR. PAYAN: Okay. And how many shunts were required to
- 2 verify track circuits under this engineering bulletin?
- 3 MR. HEILMANN: There were three locations for verifying:
- 4 10 feet inside the transmitter, 10 feet inside the receiver and
- 5 also in the middle of the circuit.
- 6 MR. PAYAN: And what form was required to record these
- 7 tests?
- 8 MR. HEILMANN: There's no separate form for that I
- 9 know of.
- MR. PAYAN: So the original PMI 11000 form was still in
- 11 effect?
- MR. HEILMANN: If the track circuit that was being
- 13 worked on used the GRS modules, then the form for the 11000 was
- 14 still being used, yes. We have another PMI. If it had been a GRS
- 15 bond installed on a Union Switch and Signal track circuit, for
- 16 example, then they would have been using a different PMI and that
- 17 would have been PMI number 41000, not in the docket.
- 18 MR. PAYAN: Okay. Now the engineering bulletin, the
- 19 October 2006, did that speak specifically to high current
- 20 impedance bonds or the regular impedance bonds or both?
- MR. HEILMANN: That bulletin was spurred by high current
- 22 impedance bond change out but it spoke to specifically putting in
- 23 a Union Switch and Signal bond in a GRS track circuit.
- MR. PAYAN: Okay. We'll speak a little more about that
- 25 procedure.

1 MR. HEILMANN: If you'd like, I can explain. You

- 2 mentioned high current bond. There may be an explanation.
- 3 MR. PAYAN: Yes, if you have one, please.
- 4 MR. HEILMANN: We were increasing our ridership capacity
- 5 in an attempt to go to 8-car trains at a Metro matters program.
- 6 We recognized that the impedance bonds, which carry the
- 7 substation, return current back to the substation from the running
- 8 rails, were going to be overloaded by too much current, and so in
- 9 the 2004, 2005 period, we had the manufacturers work with us to
- 10 develop high current impedance bonds. Those high current
- 11 impedance bonds have a lot more copper in them to carry the
- 12 traction power return currents. Because we were putting in Union
- 13 Switch and Signal high current bonds, in locations where the track
- 14 circuits were scheduled to be replaced under contact already with
- 15 Union Switch and Signal, that's what triggered that engineering
- 16 bulletin.
- 17 MR. PAYAN: Okay. I'd like to get a little bit more
- 18 into the track renewal program, the track circuit renewal program
- 19 a little later, but first, I'm going to switch to Mr. Nabb and
- 20 questions regarding reported ATC problems.
- 21 How are ATC problems reported and tracked on the WMATA
- 22 system?
- 23 MR. NABB: ATC problems can be reported by the rail
- 24 operations control center. They can be also reported by the
- 25 maintenance operations center, and they can be reported by someone

- 1 in ATC, a technician, supervisor, manager, et cetera, that becomes
- 2 aware of that problem. So there are many entities that can report
- 3 a problem.
- 4 MR. PAYAN: What is the difference between a work order
- 5 and an incident ticket?
- 6 MR. NABB: Well, let me clarify one thing. They're all
- 7 considered work orders, okay. Within the category, there is
- 8 different work types. One is an incident. Another is corrective
- 9 maintenance. And let me distinguish between the two.
- 10 An incident work order is almost always created by the
- 11 rail operations control center in response to an ATC problem that
- 12 is impacting train operation or has the potential to impact train
- 13 operation. When that incident work order is created, MOC in turn
- 14 then creates a corrective maintenance work order to support that,
- 15 and the corrective maintenance work order is what the ATC
- 16 technician then responds to.
- 17 If there is a problem that arises that is not impacting
- 18 train operation or has that potential, you will then just have a
- 19 corrective maintenance work order opened on that problem.
- 20 MR. PAYAN: Thank you. What is required to close out a
- 21 work order or an incident ticket?
- 22 MR. NABB: To close out an incident, you first have to
- 23 close out the corrective maintenance work order associated with
- 24 that problem. In order to close the corrective maintenance work
- 25 order, you have to specify four things. You have to specify the

- 1 problem, the cause, the remedy and all labor hours associated with
- 2 that ticket. Only until you make those four entries, can you
- 3 close a corrective maintenance work order. An incident can only
- 4 be closed by either the maintenance operations center or the rail
- 5 operations control center personnel. ATC people cannot close or
- 6 resolve, which is another category, or resolve an incident. Only
- 7 they can do that.
- 8 MR. PAYAN: So does maintenance have to report to MOC or
- 9 ROCC about the corrective action they've taken?
- 10 MR. NABB: Yes. If we see that an incident remains open
- 11 after the corrective maintenance work order has been closed, we
- 12 contact MOC to close or put the incident in either a closed status
- 13 or a resolved status.
- 14 MR. PAYAN: Who assigns the work orders or incident
- 15 tickets to be handled?
- 16 MR. NABB: The rail OCC on an incident work order will
- 17 assign a trouble code of ATCW, which standards for ATC wayside,
- 18 and they will assign a responsibility code of SMT, which stands
- 19 for systems maintenance. The subordinate work order, corrective
- 20 maintenance work order that is created by MOC actually puts in the
- 21 specific work center or work centers because some codes have more
- 22 than one work center associated that will take the corrective
- 23 action. That work order, because of the labor group that is
- 24 loaded, will in fact then be routed directly to those shift
- 25 supervisors to take corrective action.

1 MR. PAYAN: Is there any required follow up to ensure

- 2 ATC problems are addressed?
- MR. NABB: Yes. We require the shift supervisors to
- 4 review all of their corrective maintenance work orders. If a
- 5 period of time passes that a corrective maintenance work order has
- 6 not been resolved, then it is up to the region manager to step in
- 7 and take action to find out why that particular corrective
- 8 maintenance action has not been closed in a timely manner.
- 9 MR. PAYAN: What do you consider a typical time for a
- 10 problem to be addressed?
- 11 MR. NABB: It all depends upon the particular nature of
- 12 the problem. If it turns out that a particular part may be
- 13 required, it may go into a waiting materials piece. If track
- 14 support is required to assist us with the effort, it might go into
- 15 a waiting support action where the supervisor then would
- 16 coordinate with track. So there's no a specific defined time that
- 17 a corrective maintenance work order must be closed, but I
- 18 personally also look at the aged tickets and take follow-up
- 19 action.
- 20 MR. PAYAN: Okay. On the day of the accident, June 22,
- 21 2009, were you aware of an ATC problem near Fort Totten that was
- 22 reported five days prior?
- MR. NABB: No, I was not.
- 24 MR. PAYAN: Are you familiar with work order number
- 25 7169867?

- 1 MR. NABB: Yes, I am.
- MR. PAYAN: Can you explain who opened that work order
- 3 and what the work order detailed?
- 4 MR. NABB: Okay. If I can refer to my notes. That work
- 5 order was created at 6:50 a.m. on June 17 by MOC, and was created
- 6 as a corrective maintenance work order, not an incident. It went
- 7 to an approved status at 1920 hours on June 17th. It was assigned
- 8 to labor group ATC SR4B99, which when you interpret that code
- 9 stands for the code for the ATC maintenance work centers on the
- 10 Red Line from Gallery Place up to Glenmont, specifically, the work
- 11 centers at Brentwood Yard, Glenmont and New York Avenue to take
- 12 the corrective action. And it reported an intermittent bobbing
- 13 with track circuit B2-304.
- 14 MR. PAYAN: Was this work order addressed?
- MR. NABB: According to the records, on June 18th, an
- 16 ATC crew went into the Fort Totten train control room and
- 17 performed preventative maintenance, preventative maintenance
- 18 inspection on all the track circuits on track 2 out of the Fort
- 19 Totten train control room. There was a log entry on the 18th
- 20 indicating that they noticed that this track circuit, B2-304, was
- 21 bobbing but had to suspend troubleshooting due to a thunderstorm
- 22 in the area.
- Now, you mentioned the next five days. In looking at
- 24 the record of it being opened as a corrective maintenance work
- 25 order -- in other words, this is something that was not impacting

- 1 train operation, was not viewed as having a potential to impact
- 2 train operation, okay, and during the period of the 19th through
- 3 the 22nd, there were no additional reports that I was able to
- 4 locate indicating that that track circuit was bobbing, that it was
- 5 having any impact on train operation.
- I also went in and checked the record as to what else
- 7 may have been occurring during that time. During the time period
- 8 of June 17th through the 22nd, when this problem was occurring,
- 9 there were a total of 48 other corrective maintenance or
- 10 preventative maintenance actions that took place during those 5
- 11 days or a total of 25-man days worth of effort on just out of the
- 12 work centers responsible for this portion of the railroad.
- 13 MR. PAYAN: Are you referring to the Red Line or --
- MR. NABB: Yes, I'm referring to the Red Line from
- 15 Gallery Place to Glenmont, that that was the workload of those
- 16 maintenance technicians during that five-day period from a
- 17 corrective maintenance and a preventative maintenance perspective.
- 18 MR. PAYAN: Okay. So this was one of 48 you mentioned?
- MR. NABB: The breakdown is actually there were 39
- 20 preventative maintenance work orders completed, and this was 1 of
- 21 10 corrective maintenance work orders during that period of time.
- 22 In other words, there were 9 other corrective maintenance work
- 23 orders that were corrected during that period of time.
- MR. PAYAN: What's the hierarchy as far as addressing
- 25 preventative, corrective?

- 1 MR. NABB: Obviously, the corrective maintenance takes
- 2 precedence over the preventative maintenance. And because in many
- 3 of the cases there were several work orders that rail OCC was
- 4 unable to set a route at various stations, that obviously would
- 5 take precedence to respond to OCC being unable to set a route.
- 6 MR. PAYAN: So basically anything that impacts train
- 7 movements takes priority?
- 8 MR. NABB: Absolutely.
- 9 MR. PAYAN: Thank you. I'd like to switch back to Mr.
- 10 Heilmann and talk about replacement of ATC components.
- 11 Could you explain how WMATA determined when to replace
- 12 its original ATC system?
- 13 MR. HEILMANN: Well, your question assumes that we're
- 14 replacing the ATC system, but you're referring to the track
- 15 circuit replacement program?
- MR. PAYAN: Yes, sir.
- 17 MR. HEILMANN: Okay. The track circuit replacement
- 18 program was triggered by an obsolescence of parts. WMATA stocks
- 19 spare parts for all of the systems that we have in our operating
- 20 system but the track circuits were aged and some of the parts were
- 21 failing and we could not get replacement for those parts from the
- 22 manufacturer, not without retooling, and even then, the components
- 23 that were used to manufacture those parts, we were told might not
- 24 be available. And so we started a program with a pilot section
- 25 between our Cheverly and New Carrollton Stations. Three stations

- 1 were done in the pilot program. We advertised for a compatible
- 2 track circuit that would plug into existing train control
- 3 equipment and replaced the ones that were out there. It was our
- 4 hope at the time that just by doing that, we would free up some
- 5 spare parts and then that would buy us a little bit of time until
- 6 we had to replace the rest of the system.
- 7 Subsequently, after that first pilot program, we
- 8 scheduled 22 more train control rooms and the Fort Totten train
- 9 control room was one of those that was in process at the time of
- 10 the accident.
- 11 MR. PAYAN: Okay. You said a lot of information there.
- 12 Let me try and break it down a little bit. You said aging
- 13 components and replacement of components was a problem or was an
- 14 issue.
- 15 MR. HEILMANN: That's right. Obsolescence.
- 16 MR. PAYAN: When you say aging of components, are you
- 17 talking individual down to the capacitor, resistor, transistor,
- 18 diode level?
- 19 MR. HEILMANN: When I talk about the manufacturer not
- 20 being able to get replacement components, yes, I am talking about
- 21 the actual electronic components. But WMATA stocks spare parts
- 22 and these are PC boards for the most part, modules and things like
- 23 that. We have our own electronic shop that does electronic parts
- 24 repair, and they repaired parts, but some parts are beyond
- 25 economical repair and so they don't get repaired. They get thrown

- 1 away. We buy new parts for our systems when we run out of spares.
- 2 We have a repairable parts buy that we have go to through, but if
- 3 the manufacturer tells us they can't support that buy, then we
- 4 have a problem, and it was an obsolescence problem on the track
- 5 circuits that triggered the replacement programs.
- 6 MR. PAYAN: Okay. Now, speaking of aging components,
- 7 the system that was in place, the track circuits that were being
- 8 renewed were original equipment from the '70s, when WMATA was
- 9 first constructed; is that correct?
- 10 MR. HEILMANN: That's correct.
- 11 MR. PAYAN: Do track circuit designers, from your
- 12 experience, either the original GRS or the new US&S track
- 13 circuits, do manufacturers provide you with the life expectancy of
- 14 these components?
- MR. HEILMANN: I have never seen or heard of any of that
- 16 information coming from the manufacturers.
- 17 MR. PAYAN: So as far as WMATA was concerned, it wasn't
- 18 that the track circuits were expired; it was just the availability
- 19 of the equipment?
- MR. HEILMANN: That's correct.
- MR. PAYAN: Okay. Now you touched upon the track
- 22 circuit renewal project. You mentioned three stations. Those
- 23 were on the Orange Line --
- MR. HEILMANN: Correct.
- MR. PAYAN: -- where they were originally put in place?

- 1 MR. HEILMANN: That's correct.
- 2 MR. PAYAN: Were any procedures changed or implemented
- 3 when that track circuit renewal program started?
- 4 MR. HEILMANN: I'm not sure if we changed any
- 5 procedures. Of course, we implemented an installation procedure.
- 6 The contract in that first pilot program required the contractor
- 7 to perform all the work. There were problems with getting
- 8 contractor access and so WMATA took on the wayside portion of
- 9 installing the impedance bonds.
- 10 MR. PAYAN: What was the procedure when a track circuit
- 11 was replaced as far as installation of components?
- MR. HEILMANN: I don't know the exact details, but in
- 13 general, WMATA replaced the wayside components, the bonds and
- 14 loops on the tracks, and the contractor installed the new
- 15 equipment in the train control room and set up the new equipment
- 16 for the track circuit.
- 17 MR. PAYAN: Was there a reason for this procedure, the
- 18 sequence of events you just described?
- 19 MR. HEILMANN: Yes, I mentioned it a few minutes ago or
- 20 a minute ago. There was a perceived safety issue with having the
- 21 contractors working on the tracks. There was limited track access
- 22 time during the night. So there was going to be a limited amount
- 23 of work that they could get done if we only let them out when we
- 24 were not running trains. If we were running trains on one track,
- 25 single tracking around the work area, there were other safety

- 1 issues to be concerned about, including substation return currents
- 2 where they were going to be breaking cross-bond connections.
- 3 There would be high current DC at that location.
- 4 MR. PAYAN: I understood that. What I was referring to
- 5 is the program replaced the bonds which were then working with GRS
- 6 modules, and then later on the modules would get replaced. That
- 7 sequence of events, why the bonds first, modules second? Why not
- 8 modules first, bonds second? And I don't know the answer to
- 9 either one.
- 10 MR. HEILMANN: Well, I can tell you logically why to do
- 11 it one way, but I wasn't part of that decision process. By
- 12 replacing the bonds first, then when the contractor comes in and
- 13 replaces the module, the contractor's only required to set up the
- 14 module one time. If you replace the module first, then when the
- 15 bonds are replaced, you have to set up the module a second time.
- 16 If you replace both of them at the same time, it's a logistics
- 17 effort to coordinate. And so doing the bonds first was perceived
- 18 as being the better method.
- MR. PAYAN: By logistics, you mean the workload?
- 20 MR. HEILMANN: Logistically you had to have a crew on
- 21 the wayside working on the wayside equipment and a crew with the
- 22 contractor working in the train control room setting up the
- 23 module, so that you're working in two locations at the same time
- 24 and you have to coordinate those efforts.
- MR. PAYAN: Okay. Now, we touched on this earlier

- 1 regarding the engineering bulletin of October 2006, Exhibit P2-f,
- 2 and the bulletin mentions there were technical discussions with
- 3 engineers from both track circuit designers. Could you elaborate
- 4 on what these discussions covered?
- 5 MR. HEILMANN: I was not part of those discussions.
- 6 That was the author's function to do that, and he, the author of
- 7 that bulletin, told me that he had confirmed with both of the
- 8 manufacturers that there was not a compatibility issue, that
- 9 either track circuit could work with either bond and at that
- 10 point. I asked him to document that in an engineering bulletin so
- 11 we could get the information out.
- MR. PAYAN: So were both track designers in agreement
- 13 with the track circuit renewal program, the --
- 14 MR. HEILMANN: Based on what the author wrote there,
- 15 yes.
- MR. PAYAN: Was there any documentation provided
- 17 regarding this?
- MR. HEILMANN: Documentation from manufacturers?
- MR. PAYAN: Yes.
- MR. HEILMANN: Not to my knowledge.
- 21 MR. PAYAN: Okay. In regards to the track circuit
- 22 replacement project, were there any differences between the new
- 23 impedance bonds and the original impedance bonds from an
- 24 electronic standpoint, what the track circuit would see from a
- 25 load impedance and characteristics?

1 MR. HEILMANN: Yes, there were. I was informed at the

- 2 time that that engineering bulletin was being written, that the
- 3 turns ratio was 27 to 1 on one of the bonds and 24 to 1 on the
- 4 other bond. These are tuned transformers. The turns ratio is a
- 5 factor of coupling energy. So in the NTSB factual report for
- 6 signal group, there is a discrepancy there on page 12 on this very
- 7 subject matter, that says that the impedance was double or
- 8 approximately double -- the load impedance was approximately
- 9 double, I think is the way it's worded.
- In fact, on July 12th, while we were out investigating
- 11 the accident, we measured the difference and the measured
- 12 difference was 6 percent. But taking into consideration that one
- 13 of them closer to the room by 1,000 feet, that would produce
- 14 probably a little bit more than 6 percent difference and the turns
- 15 ratio, 24 to 1 compared to 27 to 1, would give you a difference of
- 16 11 to 12 percent. So we figured when we measured it in the field,
- 17 that that was probably more accurate.
- 18 MR. PAYAN: Okay. I did receive a lot of comments on
- 19 that area but none were in agreement. So I'd like to nail that
- 20 down.
- 21 MR. HEILMANN: Well --
- 22 MR. PAYAN: Six percent difference, can you elaborate on
- 23 that? Six percent which way?
- MR. HEILMANN: Well, let me read from my notes here. On
- July 12th, we measured the impedance of both the B2-304, Wee-Z

- 1 bond 15; and B2-294, Wee-Z bond 19. Wee-Z 15 was the Union Switch
- 2 and Signal impedance bond, and Wee-Z 19 was a GRS impedance bond.
- 3 Both bonds are tuned for 2820 hertz.
- 4 The method that we used to test them was we installed an
- 5 AC meter or MS meter in series with the bond line from the train
- 6 control room. We operated both modules at 70 percent power level
- 7 so that we would have an equivalent power level on the bond. We
- 8 measure the current and amplitude going out to the bond, and the
- 9 B2-304 Union Switch and Signal bond measured 23 volts at 173.5
- 10 milliamps, which calculated to 132.6 ohms load impedance. The B2-
- 11 294, Wee-Z 19 transmitter bond was operating at 26 volts and
- 12 measured 185.1 milliamps giving it 140.5 ohms load. So we had
- 13 132.6 versus 140.5. The 140.5 on the GRS impedance bond was 1,000
- 14 feet closer to the room. So it had 1,000 feet less copper
- 15 conductor going to it and would be expected to have a slightly
- 16 lower measurement, which brought the difference down to 5 or 6
- 17 percent instead of the 11 or 12 percent we expected.
- MR. PAYAN: Okay. That was post-accident measurements?
- 19 MR. HEILMANN: Yes, sir.
- 20 MR. PAYAN: Was this confirmed prior during the track
- 21 circuit renewal program?
- 22 MR. HEILMANN: I do not know the answer to that
- 23 question.
- 24 MR. PAYAN: Okay. The three locations, the initial
- 25 locations where the track circuit renewal program started, do you

1 know if any kind of monitoring was done after the impedance bonds

- 2 were installed, the new impedance bonds?
- 3 MR. HEILMANN: I don't know of any specific monitoring.
- 4 There were measurements and tests set up once the track circuits
- 5 were confirmed to be operating correctly. I don't know of any
- 6 other monitoring that was done of them. I do know that in the
- 7 October 2006 engineering bulletin, that the author stated there
- 8 were no problems reported after a period of time. I don't
- 9 remember what the period of time was that he recorded.
- 10 MR. PAYAN: That was after the impedance bonds. How
- 11 about the ATP modules were replaced? Was any additional
- 12 monitoring done?
- 13 MR. HEILMANN: No additional monitoring.
- 14 MR. PAYAN: So is there any documented measurements
- 15 concerning this monitoring?
- 16 MR. HEILMANN: There's no documented measurements of the
- 17 monitoring because there was no monitoring that I know of. I
- 18 don't know what monitoring you're getting at. If there's
- 19 something you want to clarify?
- 20 MR. PAYAN: The engineering bulletin specifies that
- 21 there was no problems. How did he arrive at that conclusion?
- MR. HEILMANN: That would be because there were no
- 23 maintenance problems reported, not because they were monitoring
- 24 for problems but there had not been any reported through the
- 25 maintenance management system.

1 MR. PAYAN: So it would be through the reported ATC

- 2 database?
- MR. HEILMANN: Correct. There were no reported troubles
- 4 recorded in that system.
- 5 MR. PAYAN: Okay. But there was nothing that you know
- 6 of where they went out and measured to see if it was within
- 7 tolerances?
- 8 MR. HEILMANN: Correct. When they did the set up, they
- 9 took measurements to see that the track circuit was operating
- 10 within tolerance. That was the contractor's obligation, and after
- 11 that, periodic maintenance would have done measurements on the
- 12 track circuits, but I don't think that periodic maintenance would
- 13 have been scheduled in that short period of time.
- 14 MR. PAYAN: Okay. Thank you. I'd like to switch over
- 15 to discuss previous ATC anomalies, and I'd like to start with the
- 16 2005 Rosslyn near miss. Are you familiar with this incident?
- 17 MR. HEILMANN: Yes, I am.
- 18 MR. PAYAN: Could you describe the events of that
- 19 incident?
- MR. HEILMANN: I don't have any documents here with me
- 21 to give you specific details. We first became aware of the
- 22 incident because there was an automatic signal operation failure
- 23 at Rosslyn. At Rosslyn, we have a diverging junction. The Blue
- 24 Line goes one way and the Orange Line goes the other and we
- 25 basically alternate the trains that go through there, and if the

- 1 train is supposed to go to the Orange Line, it's preprogrammed to
- 2 go to the Orange Line. The automatic train control system uses
- 3 TWC from the trains, that is, train to wayside communications, to
- 4 tell it what the destination of the train is, and then it
- 5 automatically aligns a route for the train.
- 6 The TWC system failed, and so central control had to
- 7 align the routes for the trains in manual from their central
- 8 location. So for each train, they had to set a route. One of the
- 9 trains was routed the wrong way. Instead of going to the Orange
- 10 Line, it went to the Blue Line or vice versa. I don't remember
- 11 the details on that. A request was made for an investigation, to
- 12 collect data on that. When the engineer was advising the MOC what
- 13 information to collect from the central computer for him so he
- 14 could analyze it, he overheard about the use of emergency brake in
- 15 that section of tunnel. He asked questions about it, and it
- 16 sounded like the story they had was someone had used an emergency
- 17 brake and stopped the train short of collision. So he requested
- 18 data for that incident also.
- 19 What we found out was that there was a track circuit
- 20 mid-river, that is, between Foggy Bottom and Rosslyn, that was
- 21 about 900 feet long and did not detect the presence of a train
- 22 when the train was in the middle of the track circuit. Because of
- 23 the automatic signal failure ahead, there were trains congested.
- 24 A train stopped in that track circuit mid-river, because there
- 25 were three trains ahead of him waiting for their turn to go

- 1 through that same diverging junction.
- While he was sitting there, the train behind came down
- 3 from Foggy Bottom -- when I said mid-river, this is the tunnel
- 4 section that goes under the Potomac River. So the Foggy Bottom
- 5 Station is a downgrade slope from Foggy Bottom Station to this
- 6 mid-river location. The train operator saw the train ahead and
- 7 used his ATO stop button to bring his train to a stop.
- 8 He reported it. He thought that he had a speed command
- 9 problem with his train. He reported it to Central Control and
- 10 then once the congestion moved forward -- he was in the same
- 11 location as the train ahead of him had been when he was coming
- 12 down the hill -- another train coming behind him thought also that
- 13 he was going too fast and he used his emergency brake to stop the
- 14 train. In both cases, they stopped within 50 feet of the train in
- 15 front of them. And when the ATC engineer overheard this, just the
- 16 use of the emergency brake because of excessive speed, he
- 17 requested data. And that night we discovered in the data that
- 18 there had been a loss of train detection in that track circuit.
- 19 MR. PAYAN: Is that when you first got notified?
- 20 MR. HEILMANN: I was notified at 8:00 that night, yes.
- 21 The incident occurred around 6:00.
- 22 MR. PAYAN: Can you explain your involvement in that
- 23 near miss incident investigation?
- 24 MR. HEILMANN: Yes. First, I processed the same rail
- 25 computer data that the ATC engineer who overheard the situation

- 1 was processing. We had three ATC engineers working on it, all of
- 2 us reviewing the data at the same time, and it was about 9:00 when
- 3 we concluded that we had a loss of train detection. We
- 4 immediately had operations control center install an absolute
- 5 block.
- Just for definition of an absolute block, an absolute
- 7 block is a section of track into which no other train may enter
- 8 once it's occupied by a train. So by putting in an absolute
- 9 block, the loss of train detection became no longer a safety issue
- 10 and we went to investigate it on site.
- 11 When we got on site, we connected oscilloscopes to the
- 12 track circuit. We monitored while trains were moving through the
- 13 track circuit, what it was doing, and that's where the June 12th
- 14 engineering bulletin gets its information from. We started
- 15 troubleshooting the track circuit, and the only thing we could
- 16 account for after doing all the testing of different things on the
- 17 tracks, the only thing that we could account for theoretically
- 18 that would be able to cause the problem was a cable fault between
- 19 transmitter and receiver bond lines.
- There's a twisted pair wire that goes out to the
- 21 receiver and a twisted pair wire goes out to the transmitter of
- 22 the track circuit. The two cables, conductor cables each -- the
- 23 two cables run parallel on the tunnel wall with their outer
- 24 sheaths in contact with each other for 3100 feet. If there was a
- 25 short between one conductor of one of those pair and one conductor

- 1 of the other pair, then it could have given us a runaround circuit
- 2 to bring our transmitted signal from the track -- or going out to
- 3 the track, back from the track without ever reaching the track,
- 4 come back on the receiver cable because of capacitive coupling.
- 5 So we thought that was going to be the problem.
- 6 And the first thing we did was, when we had exhausted
- 7 other troubleshooting techniques, the first thing we once we
- 8 thought that was the problem was cut the bundle ties at the top of
- 9 the rack. And as soon as we cut the ties, the problem cleared
- 10 itself and we were left with nothing left to troubleshoot except
- 11 visual, what we could inspect for.
- 12 MR. PAYAN: Were you able to recreate the conditions
- 13 that the trains experienced before you did that?
- 14 MR. HEILMANN: When we were testing the track circuit,
- 15 it did have a failure of train detection. We had an absolute
- 16 block in place but the trains were losing their detection going
- 17 through the track circuit, yes.
- 18 MR. PAYAN: You did see the problem?
- 19 MR. HEILMANN: We did see that problem for several
- 20 hours. I don't know if it was two days or several hours.
- MR. PAYAN: Who participated both internally from WMATA
- 22 and externally in the onsite investigation?
- 23 MR. HEILMANN: There were members of the maintenance
- 24 staff from TSSM, system maintenance at the time, I think, who
- 25 participated in the investigation. There were three engineers,

- 1 myself and Tom Kello (ph.) and John Glancestar(ph.), the three of
- 2 us, investigated in the train control room. And after, I guess,
- 3 about 24 hours into the problem, we called Alstom and asked them
- 4 to send somebody down. And they send down, on the first trip,
- 5 then sent down one of their engineers and on the second trip, a
- 6 few days later, they had sent down two engineers.
- 7 MR. PAYAN: And did they all agree with what you
- 8 determined?
- 9 MR. HEILMANN: The statement in Alstom's letter says
- 10 that it was the most probable cause but they weren't absolutely
- 11 convinced that it was the cause and we were in a similar
- 12 situation. We couldn't come up with another idea for the cause of
- 13 that problem, and the fact that we had cut the cables led us to
- 14 believe that we had a cable problem even more. To correct the
- 15 problem, the deputy general manager at the time instructed us to
- 16 replace the cables and everything connected to them, and we did
- 17 that and put it back in service when it was working properly.
- 18 MR. PAYAN: So cutting of the cables kind of confirmed
- 19 the capacitance that you theorized?
- 20 MR. HEILMANN: Cutting the cable bundle ties may have
- 21 broken an electrical connection between the cables that were at
- 22 that location, but we didn't visually find that electrical
- 23 connection.
- MR. PAYAN: So as a result of your investigation, what
- 25 components specifically were replaced between Rosslyn and Foggy

- 1 Bottom?
- 2 MR. HEILMANN: Just for the one track circuit -- this
- 3 was track circuit 2C-111. For that one track circuit, we replaced
- 4 both the transmitter and receiver bond line cables from the train
- 5 control room all the way to the transmitter and receiver locations
- 6 on the track, and we replaced the impedance bonds on both the
- 7 transmitter and receiver end, and we replaced the modules on the
- 8 transmitter and receiver end in the train control room.
- 9 MR. PAYAN: And just for the record, what manufacturer
- 10 was being used, the components?
- 11 MR. HEILMANN: I'm sorry. All of this equipment was GRS
- 12 equipment.
- 13 MR. PAYAN: Everything was GRS. Bonds and modules?
- MR. HEILMANN: That's correct.
- MR. PAYAN: Okay. As a result of your investigation,
- 16 what procedures were changed or implemented after your
- 17 investigation?
- MR. HEILMANN: For procedural changes, there was the
- 19 engineering bulletin on June 19th that stated from now on when you
- 20 do a verification test of a track circuit for an audio frequency
- 21 track circuit, you test it in two places. There were other
- 22 changes made to our standard specifications. I have some notes
- 23 specifically on what we changed on their standard specifications
- 24 for that. There was also another procedure.
- During the investigation of the incident at Rosslyn, we

- 1 began working with one of our programmers in IT to create the loss
- 2 of shunt tool and then eventually we scheduled that to be done on
- 3 a periodic basis.
- 4 We changed the standard specifications for bond line
- 5 parallel runs so that on new construction our track circuits will
- 6 not have both the receiver and transmitter bond lines in close
- 7 proximity to each other for a 3,000-foot run. I don't have the
- 8 specific details of the change. And we changed our standard
- 9 specification, prohibiting track circuits that are 55 percent or
- 10 greater in length between cross-bond locations, sort of based on,
- 11 not that track circuit, but the other possible runaround circuits
- 12 that we were investigating when we troubleshot it.
- In the new verification procedures for track circuit
- 14 verification, the T111 that we spoke of earlier, it requires a
- 15 three-point shunt verification now. That is implemented, signed
- 16 off and approved by the maintenance manager and the engineering
- 17 manager. I don't know when that went into effect, but I think it
- 18 was around October or November, but that came out of the Rosslyn
- 19 incident.
- 20 MR. PAYAN: You mentioned the loss of shunt tool. Do
- 21 you recall when that was implemented?
- MR. HEILMANN: I don't know the exact date that it was
- 23 implemented, but I do know that on June 24th, we were using it.
- 24 June 24, 2005. The engineers, once we explained to IT what we
- 25 wanted to mine in their data and how we wanted to mine it, they

- 1 developed a tool for us to use, and we started using it sometime
- 2 in June of 2005. My engineering group used it on a weekly basis.
- 3 The LOS tool, what we refer to it as, when it is run, it tests the
- 4 entire train control system for the entire Metro system, for
- 5 anomalies in track circuit operation, and the anomalies are time
- 6 based. So it doesn't really tell us whether we lost train
- 7 detection. It takes a proficient engineer to look at the data in
- 8 the form that we had it in 2005 and determine what occurred.
- 9 The engineers performed this loss of shunt tool for the
- 10 entire system on a weekly basis for about a year, and then we
- 11 codified the procedure for doing it and gave it to the maintenance
- 12 manager and recommended that he do it once a month.
- 13 MR. PAYAN: That was my next question. Mr. Kubicek
- 14 mentioned once a month frequency. What chunk of data was reviewed
- 15 once a month?
- MR. HEILMANN: Well, the recommendation in the procedure
- 17 was to do a three-hour peak service period once a month. So when
- 18 I say three hour, the chunk of data would be for a three-hour
- 19 period for the entire Metrorail system.
- 20 MR. PAYAN: And you said that was turned over to
- 21 maintenance. Are you referring to TSSM?
- 22 MR. HEILMANN: Yes. At the time, Mr. Nabb was not the
- 23 assistant general superintendent. It was turned over to his
- 24 predecessor.
- MR. PAYAN: And, Mr. Nabb, if you can answer this, at

- 1 the time of the accident, was the frequency still the same, once a
- 2 month? The Fort Totten accident, I'm sorry.
- MR. NABB: In going back and checking for detailed
- 4 records, okay, I could not find any records of this having been
- 5 run on a monthly basis and documented. Conversations with ATC
- 6 staff members indicated that they were doing it but not
- 7 documenting it.
- 8 MR. PAYAN: So as far as you're concerned, it was still
- 9 once a month, the three-hour period, from the information you were
- 10 provided?
- 11 MR. NABB: From the information that I was provided, I
- 12 was told that it was being run monthly. In fact, some managers in
- 13 ATC informed me they were, in fact running it weekly, but when
- 14 inquired as to the documentation, there was none available.
- 15 MR. PAYAN: Okay. Thank you. I'd like to switch over
- 16 to the 2009 Potomac Avenue Station overrun. I'll start with Mr.
- 17 Heilmann and if you need to hand it off, I'll let you decide.
- 18 Are you familiar with the 2009 Potomac Avenue Station
- 19 overrun?
- MR. HEILMANN: Yes, I am.
- 21 MR. PAYAN: Could you describe the events of that
- 22 incident?
- 23 MR. HEILMANN: We first became aware of it because
- 24 whenever a station overrun occurred, and they happened on a
- 25 frequency of anywhere between 20 and 60 times per month, every

- 1 station overrun was reviewed and analyzed by an ATC engineer, and
- 2 he would collect the data from the rail operations computer system
- 3 and review the parameters that the train operated under and
- 4 determine whether the train operator was in manual or if the train
- 5 operator was in automatic, et cetera, whether the train failed to
- 6 recognize a programmed station stop and that sort of thing.
- 7 The engineer who reviewed -- I guess I should back up.
- 8 We became aware of it a week after the event. The engineer who
- 9 would have reviewed it -- we had a 48-hour turnaround on our
- 10 analysis. The engineer who would have reviewed that incident, was
- 11 packing for vacation, and his supervisor checked and discovered
- 12 that this was left work. So he did the analysis himself.
- 13 When he did the analysis, he noticed that the train
- 14 operator who reported that he overran the station, we couldn't,
- 15 with our data, verify that he overran the station. But the train
- 16 operator claimed to have overrun the station by a full car. And
- 17 the reason we couldn't verify that he overran the station is
- 18 because the block that he entered to leave the station was already
- 19 occupied. The automatic train protection system prevents a train
- 20 from coming into an occupied block in manual or automatic, and so
- 21 this train was in automatic. So because we saw that the block had
- 22 been occupied already and this train overran the platform, we
- 23 notified our safety department immediately because they're a
- 24 single point of contact with TOC and they have to know whenever we
- 25 come up on a hazard. We notified the car engineering group, and

- 1 we began an investigation on the scene.
- I don't know how much further you want to go on that,
- 3 but in our investigation on the scene, we were analyzing why did
- 4 the train or did the train get speed commands, and if it did, why
- 5 did it get speed commands? So we tested the speed command logic
- 6 that provided speed commands to the train and we tested it for
- 7 several days with different methods, and could find no fault in
- 8 it.
- 9 This had nothing to do with train detection failure at
- 10 this location, and I guess the rest I can turn over for Mr.
- 11 Hiller.
- MR. PAYAN: Thank you. Mr. Hiller, who participated in
- 13 that investigation both internally and externally?
- 14 MR. HILLER: Internally, we brought in our own internal
- 15 engineering folks, members from Harry's staff. Those are the
- 16 systems engineering groups. We had a member of the safety
- 17 department. We also had some supporting information brought in
- 18 from our own training group as far as, you know, how the equipment
- 19 is supposed to operate, our car maintenance group as well, we
- 20 brought those folks in. So this was a collective approach to take
- 21 a good hard look at the failure.
- So as we got into the failure, some of the first things
- 23 we did is we took the equipment in its original configuration and
- 24 we brought it back to the Rosslyn location with instrumentation
- 25 aboard. We tried many times to recreate the failure just as

- 1 described. We were not successful.
- We also conducted interviews with the operator. We
- 3 wanted to have his feedback, what did he see as far as the aspect
- 4 of the equipment, speed readouts and things like that? So all of
- 5 this information sort of bubbled up into our analysis.
- 6 So as we progressed with the investigation, we took the
- 7 vehicle into the Maintenance Department. There we began a very
- 8 iterative sort of detailed approach with the ATC system, and a
- 9 finding was we found a relay that displayed what we called slow
- 10 drop characteristics or delay drop characteristics, and I really
- 11 relied on Mr. Heilmann's knowledge about these types of relays.
- 12 Apparently the WMATA system experienced some of these situations
- 13 back in the early 2000 portion of its history.
- 14 So it was at that point, we contacted Alstom and we
- 15 wanted to have a full and complete analysis, not only the relay
- 16 but the characteristic failure. We wanted to understand it
- 17 because in our evaluation we needed to have many events stacked up
- 18 for this failure to occur. It just wasn't what we would perceive
- 19 or diagnose as a single point failure. These systems are not
- 20 supposed to fail that way.
- 21 So at this point in the investigation, we were just
- 22 waiting on some feedback from the OEM and at that point, we will
- 23 follow-up with recommendations and procedure modifications and
- 24 training.
- MR. PAYAN: So that investigation is still open?

- 1 MR. HILLER: Yes, sir.
- 2 MR. PAYAN: Okay. Now for the two accidents that we
- 3 just discussed, were either of you in the process to review the
- 4 reports that were prepared by the safety department that were
- 5 provided to TOC?
- 6 MR. HILLER: We worked in concert with the safety
- 7 department at the time. At the time we had a member on the
- 8 investigation team, and he since departed, and as the structure of
- 9 the safety department has changed, you know, that opportunity has
- 10 not presented itself to bring him in on sort of the discovery
- 11 phase. So where we were in our discovery phase with the safety
- 12 department, that's where they played a good role, especially with
- 13 the communication to TOC.
- MR. PAYAN: How about Rosslyn?
- MR. HILLER: I was not --
- MR. PAYAN: Mr. Heilmann?
- 17 MR. HEILMANN: Restate the question.
- MR. PAYAN: Were you in the review process to review the
- 19 report provided to TOC by the safety department or the report that
- 20 TOC's consultant provided to them?
- MR. HEILMANN: I prepared a report on June 22nd, when we
- 22 were close to finished with our investigation on the incident at
- 23 Rosslyn, and I provided that to our safety department. Our safety
- 24 department had an independent investigative team put together with
- 25 one of my staff. I did not review the output of that team. I was

- 1 asked about it during the proceedings since the June 22nd
- 2 accident, if I had known about it, and I did not see it before
- 3 that. However, the TOC did come to visit me after the incident
- 4 and interviewed me in the chief engineer's office for a couple of
- 5 hours about all the details of what we had done during the
- 6 investigation.
- 7 MR. PAYAN: Are you knowledgeable of any of the
- 8 recommendations or findings that were --
- 9 MR. HEILMANN: Only since the accident, the June 22nd
- 10 accident.
- 11 MR. PAYAN: That was the first time you saw the report
- 12 or --
- MR. HEILMANN: That's the first time I saw the report.
- MR. PAYAN: Okay. Thank you.
- 15 I would like to switch again. The 2009 Fort Totten
- 16 collision, Mr. Heilmann, when were you notified of that event?
- MR. HEILMANN: Probably between 5:00 and 6:00 that
- 18 evening.
- 19 MR. PAYAN: Shortly after it happened. Now can you
- 20 explain how the investigation identified parasitic oscillations?
- MR. HEILMANN: Do you want the 5-minute answer or the
- 22 22-minute answer?
- MR. PAYAN: Mr. Chairman?
- 24 CHAIRMAN SUMWALT: Well, we are here to collect the
- 25 facts, and so I suggest that we give the answer, whatever it takes

- 1 to get the facts out. Just for everyone's planning, what we will
- 2 do is -- the day is getting old, getting along. So Mr. Payan,
- 3 when you are through, we will break this panel before we get into
- 4 Mr. Downs with the crashworthiness. So that's the plan. So
- 5 whenever you're through, we'll just break it right there. Okay.
- 6 So that's the plan. So the long answer to your short question, do
- 7 whatever it takes to describe the events of the parasitic
- 8 oscillation. This is a key point, so we don't want to shorten it
- 9 up. Thank you.
- 10 MR. HEILMANN: Thank you. Mr. Payan, just stop me if
- 11 you think I'm getting into too much detail for the question you're
- 12 asking.
- 13 We began that evening while the crash site was being
- 14 handled by others. We checked our LOS tool to find out what
- 15 occurred, if we could tell. We saw immediately that there was a
- 16 loss of train detection in the B2-304 track circuit, and we
- 17 further ran the loss of shunt tool back in time and discovered
- 18 that this loss of train detection began occurring on June 17th,
- 19 the beginning of revenue hours on June 17th.
- We immediately requested maintenance records and Mr.
- 21 Nabb's team provided us with the maintenance records. Within
- 22 minutes, we noticed that the bond had been replaced and the power
- 23 level had been increased on June 17th. And when I say the bond,
- 24 this is the transmitter bond for that track circuit.
- 25 NTSB had control of the scene and the investigation and

- 1 what steps or tests were going to be performed from then on when
- 2 we went to the field. Our team in the field included members from
- 3 NTSB, WMATA, the Tri-State Oversight Committee, FTA; later FRA
- 4 joined us and Alstom and Ansaldo.
- 5 The first thing we did while the wreckage was still on
- 6 site is we tested the frequency response of the impedance bonds to
- 7 make sure that they hadn't been destroyed for logistics purposes,
- 8 testing the track circuit. We needed to know that as soon as
- 9 possible.
- 10 After the wreckage had been cleared, on June 24th, we
- 11 did the shunt verification tests in three points. When we did it,
- 12 we found that the track circuit would verify 10 feet inside the
- 13 transmitter, not in the middle of the track circuit at all, even
- 14 with two hardwire shunts in the middle of the track circuit, and
- 15 then at the receiver end of the track circuit, when we tried to
- 16 verify the track circuit, it would bob; that is, it would go down
- 17 and come up. And when I say go down and come up, I mean show
- 18 occupancy and vacant. The reason for referring to that as up and
- 19 down is because the output of the track circuit is a vital relay,
- 20 and when that relay is in the up state, the track circuit is
- 21 considered vacant. When it's down, it's considered occupied.
- The next step was to use a test train and perform tests
- 23 of train detection on the track circuit without doing any other
- 24 tampering with it, and we did one pass at 20 miles per hour and
- 25 then we did another pass moving the train in 50-foot increments,

- 1 stopping the train, taking measures and moving it again. The
- 2 track circuit did fail train detection while we were doing that
- 3 test also.
- While we were doing it, we monitored the speed commands
- 5 on the display on the train, and that gave us a clue when the
- 6 train was being detected and not being detected. As soon as the
- 7 train is not detected, the speed commands drop away.
- 8 The next step, while the test train was still on the
- 9 track, was to have the track circuit power level -- or not power
- 10 level, track circuit adjustment performed which included a power
- 11 level adjustment. Originally, the date from June 17th showed that
- 12 the track circuit had been adjusted from 30 percent to 55 percent,
- 13 but when we performed the test according to the procedure, we
- 14 adjusted the power level to 70 percent. These percentages are
- 15 stepped as a transformer output on a buffer amplifier and it has
- 16 tap settings on it, and these percentages are stepped in fixed
- 17 amounts. We don't have much control over that. So the next
- 18 increase from 30 percent would have been 55 percent and then to
- 19 70.
- 20 We opened the transmit and receive bonds on the track
- 21 while the test train was still out there and verified that the
- 22 tuning jumpers inside the bonds were properly set for the correct
- 23 frequencies. The Union Switch and Signal bond is adjusted for the
- 24 frequency that you want to use by clipping wires between turret
- 25 lugs.

- 1 After removing the test train from the track, we
- 2 directed the midnight shift to test 15 vital relays that were used
- 3 in the track circuit's operation and the speed command selection
- 4 circuit for that track circuit. All of them were tested and found
- 5 to be normal operating specifications.
- 6 And the next thing that we did was we had the original
- 7 GRS transmitter bond reinstalled. It was still on the wayside at
- 8 the location, had been there for all five days, and we had that
- 9 bond reinstalled and adjusted and tested to track circuit. At
- 10 that time and it tested okay.
- Then we had the June 17th Union Switch and Signal bond
- 12 reinstalled and adjusted and the shunt test failed again but this
- 13 time it failed in a different way. This time it failed at the
- 14 transmitter end of the track circuit.
- 15 We then had a new Union Switch and Signal bond, the
- 16 correct model, installed and adjusted and tested, and it worked
- 17 properly. Then we had the June 17th bond reinstalled and adjusted
- 18 and tested and it worked properly. So in all, we changed the bond
- 19 seven times in this process for several days of work, and three of
- 20 those times we had gone back to the June 17th bond, and now it was
- 21 working properly, and we didn't have a failure.
- The next thing we did is we pumped out the manholes to
- 23 inspect cable splices that were along the way, and we used a
- 24 spectrum analyzer, an instrument that allows us to see what noise
- 25 is in the system. We used a spectrum analyzer to test for

1 possible electromagnetic interference from a nearby radio station

- 2 and also from the traction power substation.
- 3 We requested and subsequently was performed an
- 4 ultrasound test of the rails, using the Sperry car, and we did
- 5 interviews with the employees that were involved in the work done
- 6 prior to the accident.
- 7 The next thing that we did, since we didn't have a
- 8 failure and we had an intermittent condition, in discussing what
- 9 the problem could be, we went to look at the cables. So we
- 10 performed a cable insulation test on the bond lines associated and
- 11 also the maintenance telephone lines that go out to those same
- 12 junction boxes at the bonds. We actually tested several different
- 13 bonds, not just the two on that track circuit, but nearby bonds on
- 14 both tracks and we discovered three bond lines failing our cable
- 15 insulation standard. They were all above 200 kohms but they were
- 16 below 1,000 kohms or 1 megaohm, which is our minimum.
- Many of the maintenance telephone wires failed under 50
- 18 kohms. We later found out that most of that was caused by a
- 19 conducting residue that was on the terminal insulating blocks
- 20 within the junction boxes.
- 21 Next, we isolated the bond lines and checked for stray
- 22 energy using a spectrum analyzer. We found harmonics of traction
- 23 power, but they were very weak signals, multiples of 60 hertz, not
- 24 enough to affect the track circuit because they were so weak.
- We measured the track circuit receiver frequency and

- 1 found it to be in tolerance. This is a test of the receiver's
- 2 filter. We reviewed the maintenance logs at other stations
- 3 because during the interview process, we had a lot of red
- 4 herrings, I guess you could say, coming up from the maintainers
- 5 who were reporting all kinds of things. So the NTSB and myself
- 6 went to several stations and reviewed log entries.
- We measured the bond line capacitance next, and we
- 8 didn't have a standard to go by, but we measured more than just
- 9 the two impedance bonds for the track circuit, and we had balanced
- 10 capacitance on the bond lines to ground and the numbers all
- 11 appeared to be relatively uniform and normal.
- We did extensive testing of possible telephone wire
- 13 runaround circuits because it was possible, we thought, that the
- 14 telephone wires that shared the junction box with the impedance
- 15 bond wires could have created a runaround circuit that took energy
- 16 from the transmitter junction box to the receiver junction box, in
- 17 which case the track circuit would be able to show vacant even
- 18 though there was a shunt on the rails. We couldn't find any
- 19 runaround circuit that we could create using a lot of imagination
- 20 and many different investigators. So we ran into a dead end on
- 21 that.
- We isolated and checked the telephone wires for track
- 23 energies, that is, track circuit energies that might be on the
- 24 telephone wires using the spectrum analyzer, and although we found
- 25 some very, very low levels, it was not a concern.

1 We tested all the telephone wires and connections on the

- 2 local track for crosstalk to the adjacent track. We actually did
- 3 put in when we found -- I didn't mention this earlier. When we
- 4 found the lower impedance on the cable insulation for the bond
- 5 lines, one of those bond lines that had a low impedance was on the
- 6 other track, and we instituted an absolute block as soon as we
- 7 found that because there was a possibility of crosstalk. Now
- 8 we've gotten to the point where we're testing for crosstalk.
- 9 We tested the bond line individual conductors for audio
- 10 leakage to ground, and we found them balanced and extremely low
- 11 levels. We tested the load impedance of the Union Switch and GRS
- 12 impedance bonds for comparison, that I mentioned earlier. Right
- 13 after we did that, we discovered that the B2-294 signal was
- 14 affecting the B2-304 track circuit receiver. B2-294 is another
- 15 1,000 feet away, and we could see on the oscilloscope signal for
- 16 the B2-304 track circuit, we could see what was synchronized with
- 17 the transmitter signal coming out of B2-294, and we could cut off
- 18 that transmitter and it would go away on the other track circuit.
- 19 We didn't determine how that got there but I'll get to that later.
- 20 We tested for rail leakage to earth using GRS's track
- 21 quality meter, and this is a meter that we use out on the track.
- 22 We inject a signal into the rails and we look for leakage to the
- 23 earth or through insulated joints and things like that. We didn't
- 24 find any problems with that tester.
- We dug up the buried cables that feed both ends of the

- 1 track circuit and inspected them by hand, and they seemed
- 2 pristine, brand new condition, and they were buried in a sand bed
- 3 with a wooden plank over top of the stand to protect the sand from
- 4 damage and the sand protected the cable. They appeared to be
- 5 brand new or in brand new condition.
- 6 We tested for possible junction box cross-wiring where
- 7 it was surmised that it was possible, when we kept changing out
- 8 the impedance bonds, maybe we were wiring it up correctly and
- 9 somebody else had wired it incorrectly on June 17th, and we didn't
- 10 have evidence to tell us how it was wired that day. So we tried
- 11 to duplicate the problem by cross-wiring within the junction box,
- 12 mislocating, disarranging the wires to the wrong locations, and we
- 13 were not able to make the track circuit perform in its failed
- 14 state that way.
- We analyzed the coupling between other track circuits
- 16 with the 28/20 that was coming into the B2-304 and we analyzed the
- 17 bleeding code rates between the B2-304 and B2-312 track circuits.
- 18 The B2-312 track circuit is operating at a different audio
- 19 frequency, so we should not have been seeing any activity on the
- 20 oscilloscope in the B2-304 track circuit caused by the B2-312
- 21 track circuit but it was there. We inspected the module
- 22 components with a microscope at that point, looking for how is
- 23 this signal getting there? It's bleeding over somehow. How?
- In the process, we discovered that by manipulating the
- 25 transistor panel on the back of the module, the receiver signal

- 1 varied. We swapped spare modules in and out for both transmitter
- 2 and receiver and that didn't alleviate the problem, but we don't
- 3 have a problem, if you recall; we have intermittent problems
- 4 coming and going.
- 5 We installed terminating receivers, using the original
- 6 transmitter and receiver modules now. We installed terminating
- 7 receivers in place of the field wiring at the back of the rack,
- 8 and what that means is the rails and the impedance bonds are no
- 9 longer in the circuit with the transmitter and receiver. Each,
- 10 the transmitter and receiver is terminated on a resistor. So
- 11 they're not electrically connected to each other, but to our
- 12 surprise, the track circuit showed vacant.
- 13 We attempted shielding receiver and transmitter in the
- 14 module sections, and I think that was something that probably
- 15 should have been dedicated to a lab. We were in the field and we
- 16 couldn't get a very good fix on that, but it didn't make any
- 17 difference. We discovered then that manipulating the cables on
- 18 the back of the module, that is, the power cables and the bond
- 19 line cables that feed the module, or even unbolting the module
- 20 from the rack, varied the undesired receive signal that we were
- 21 seeing.
- We found that the problem cleared whenever we connected
- 23 a power level adjustment test fixture. This is a box that allows
- 24 us to simulate the power level settings of the track circuit
- 25 instead of actually doing the power level settings on the track

- 1 circuit, because those are hardwired, jumper leads on the back of
- 2 the module. If we were to make changes to those hardwired
- 3 jumpers, the more often you do it, the more likely you're going to
- 4 break something. And so we have a power level test box that plugs
- 5 in place of the cable. There's a Y cable and it has a dial on it
- 6 that you can set all the different power levels. But just having
- 7 that box plugged in, changed something in the track circuit and
- 8 caused the problem to go away.
- 9 The next thing we did is we checked the DC power
- 10 distribution for coded track circuit signal. The DC power
- 11 distribution is 28 volts DC. It's highly regulated. There's very
- 12 little ripple on it at the source. It's distributed throughout
- 13 the room and the question came to mind, are we cross-talking
- 14 between modules by putting coded audio frequency track circuit
- 15 signal on top of the DC power supply?
- 16 What we found was faint, very, very faint signals there
- 17 that we didn't consider to be a problem.
- The next thing that we did was check the inductances and
- 19 capacitances of the module components. We pulled a module out of
- 20 the rack and set it on the floor and recorded the capacitances and
- 21 inductances of the circuit components that were in the amplifier
- 22 section. All of them appeared to be exactly what they were
- 23 supposed to be by design.
- 24 We tried a different receiver filter on the track
- 25 circuit, and it didn't make any difference. If you recall, we had

- 1 tested the receiver filter already and it was in spec.
- We moved the suspected modules to a different track
- 3 circuit location. We installed them into the B2-294 track
- 4 circuit, terminating that track circuit the same way we had on B2-
- 5 304. That track circuit also showed vacant now with the modules
- 6 out of B2-304.
- 7 At that point, we concluded that the modules were the
- 8 reason why we had a train detection loss, and we transported them
- 9 to the laboratory. The training laboratory has a mock up of a
- 10 rack of audio frequency track circuits, and we tested them further
- 11 there.
- We tested several other modules in the lab over almost
- 13 three weeks, at least two and a half weeks. We traced the signal
- 14 path, found the oscillation, traced a signal path, and where we
- 15 couldn't trace it, we were able to interrupt it by breaking the
- 16 electrical connection, and so we worked out what was the signal
- 17 path for the oscillation to get from the transmitter to the
- 18 receiver.
- 19 I don't know what else to tell you about that unless you
- 20 have specific questions.
- MR. PAYAN: No, just kind of summarize, to say it a
- 22 different way from the way you said it, just for our non-signal
- 23 people, when you eliminate the relays, bonds, cables,
- 24 electromagnetic interference, maintenance, telephone, what did
- 25 that leave?

1 MR. HEILMANN: We had an intermittent problem. So in my

- 2 mind --
- 3 MR. PAYAN: Yes.
- 4 MR. HEILMANN: -- when there's an intermittent problem,
- 5 you can't eliminate anything unless the problem is manifesting
- 6 itself at that time. So for, I guess it was the first three to
- 7 four weeks, we had an intermittent problem that would disappear on
- 8 us and you can't conduct a test on a problem that's not there.
- 9 Then all of a sudden we had the problem steady, and that's when we
- 10 found what the source of the problem was. Testing all those other
- 11 things were prudent measures because we may have been able to find
- 12 the cause of the intermittent problem if the test data showed that
- 13 something was good. While the problem did not exist, then it was
- 14 inconclusive.
- MR. PAYAN: I guess that's what I'm trying to ask
- 16 specifically. We went through all these tests and you identified
- 17 certain things out of tolerances, but at the end, you ended up
- 18 with the path between the two modules?
- 19 MR. HEILMANN: Yeah, the acid test I guess you could
- 20 say. Once we did have the track circuit failing, terminating
- 21 resistors instead of the field wires and field equipment and
- 22 track, and just terminating the transmitter and terminating the
- 23 receiver, and still having the track circuit show vacant meant
- 24 that we had a problem in the train control room. That eliminated
- 25 the wires to the field, the EMI that might have been coming from a

- 1 radio station, and other things like that, yes.
- 2 MR. PAYAN: And specifically the impedance bonds.
- 3 That's what I'm trying to get at.
- 4 MR. HEILMANN: Okay. Yes, it definitely kept the
- 5 impedance bonds out of the failure mode.
- 6 MR. PAYAN: It seems that this problem, this loss of
- 7 detection began after the impedance bonds was replaced?
- 8 MR. HEILMANN: Correct.
- 9 MR. PAYAN: But the investigation found that it wasn't
- 10 the bond that was contributing to the parasitic oscillations,
- 11 correct?
- 12 MR. HEILMANN: That's correct.
- 13 MR. PAYAN: I don't want to put words in your mouth.
- MR. HEILMANN: Well, I think I want to finish the
- 15 sentence. That is correct, but in order to change the impedance
- 16 bond to a different model impedance bond, there's a change in the
- 17 load impedance on the transmitter. So the transmitter had to be
- 18 adjusted. The only way to adjust the transmitter for that change,
- 19 if it needs an adjustment, is to change the power level setting,
- 20 and when you change the power level setting, it changes the
- 21 amplitude of the signal coming out of that transmitter and so, the
- 22 failure mode occurred.
- MR. PAYAN: That's what I was getting at. That's what I
- 24 was trying to -- thank you.
- Mr. Dobranetski in his opening remarks mentioned that

- 1 during the investigation, a resistor was tried, a capacitor was
- 2 changed and they all affected parasitic oscillations. And WMATA
- 3 kind of was doing this while chasing down this parasitic
- 4 oscillation. Has Alstom provided any procedures as far as how to
- 5 address the parasitic oscillations?
- 6 MR. HEILMANN: No. Alstom has not provided any
- 7 procedures, but I immediately drafted one and worked in the field
- 8 for the trials on that test procedure, revised it twice and
- 9 produced a procedure by the end of September which I provided to
- 10 Alstom. Alstom reviewed it and said they had no comments. The
- 11 original version, they gave three comments on, and then we did one
- 12 more revision, and they had no comments on the final version. We
- 13 conducted training on that internally. They haven't provided us
- 14 with a procedure yet to test for parasitic oscillations, but we
- 15 have used that procedure to test all track circuits for parasitic
- 16 oscillations.
- MR. PAYAN: What does your procedure entail?
- 18 MR. HEILMANN: It entails connecting an oscilloscope to
- 19 the transmitter that shares the module with the receiver of the
- 20 track circuit under test. Follow -- start over. We connect an
- 21 oscilloscope to the transmitter, pre-amp of a transmitter, in a
- 22 module that's shared with the receiver of a track circuit that we
- 23 consider to be under test. And while we have the oscilloscope on
- 24 that pre-amp, we look for oscillations on the audio frequency
- 25 signal at that pre-amp, and if we find the oscillations are

1 present, then we look for what type of oscillations they are, and

- 2 the procedure details how to tell the different types.
- There's a continuous oscillation that's possible. There
- 4 is a local oscillation that's possible, and there's an external
- 5 oscillation that's possible that we might find. The continuous
- 6 oscillation is continuous noise on the signal, and at this point,
- 7 we are considering that to be harmless. It's usually very low
- 8 amplitude. It just gives the blur on the oscilloscope trace.
- 9 The local oscillation would show that during peaks of the audio
- 10 frequency signal, there is an oscillation but only during peaks.
- 11 It might be a positive alternation peak or a negative alternation
- 12 peak or both, but that would be the local oscillation.
- 13 And then the external oscillation would show throughout
- 14 the audio frequency in sort of a wave form. We would see at
- 15 different locations in the wave form some oscillations, and we
- 16 would have to then, using the procedure, determine what is the
- 17 source of that oscillation. If we find that the source of that
- 18 oscillation comes from the transmitter or a transmitter -- when I
- 19 say the transmitter, of the track circuit we're testing, or a
- 20 transmitter that shares that same audio frequency, then we have a
- 21 potentially hazardous situation that needs to be mitigated.
- 22 And the procedure goes further to require a hard shunt
- 23 in the middle of the track circuit for a final test. And when the
- 24 hard shunt is in the middle -- that is, a hardwire shunt in the
- 25 middle of the track circuit. When the hardwire shunt is in the

- 1 middle of the track circuit, if we measure at the receiver less
- 2 than 400 millivolts, then we would consider that track circuit to
- 3 be safe, temporarily today anyway, and we would move on. If we
- 4 find more than 400 millivolts, then we would replace the module.
- 5 MR. PAYAN: Thank you. Has Alstom provided any possible
- 6 solutions on interrupting the path of this parasitic oscillation?
- 7 MR. HEILMANN: Yes, they have. In October, they came
- 8 down and demonstrated some ideas about how to mitigate the
- 9 problem. We proposed to them in August, August 7th, a resistor on
- 10 the bias board which is prior to the power amplifier, because as
- 11 we had demonstrated that previous week, that can stop the
- 12 oscillations from occurring, but they're still reviewing the
- 13 possibility of whether they're going to approve that method or
- 14 find another method to stop the oscillations from occurring.
- 15 What they demonstrated to us in October is two different
- 16 methods of preventing the oscillations from traveling between
- 17 modules. In one situation or one of their remedies, they had
- 18 insulating blocks that were used to step the transistor heat sinks
- 19 away from the module, so that the transistors were now on
- 20 insulators and they could not conduct through the heat sinks to
- 21 the module, that is, the oscillation could not conduct.
- The other method that they used involves using ferrite
- 23 chokes and in October when they demonstrated it to us, the ferrite
- 24 chokes were solid pieces, solid donuts that we would be putting
- onto existing cables, and those cables have large connectors on

- 1 them. So it was really an impractical operation to put them on in
- 2 a system that's operating. It's not too bad in the laboratory.
- 3 The same was true with the insulating blocks on the transistor
- 4 heat sinks.
- 5 Subsequently, they came up with a two-piece ferrite
- 6 choke that we could put on the cable and clamp around the cable
- 7 without disturbing the existing equipment. We tested that in
- 8 January at the Rosslyn Station, and installed it on all of the
- 9 track circuits at the Rosslyn Station in January. It's under
- 10 test.
- MR. PAYAN: I'm going to wrap it up. Just one question,
- 12 and I'd like Mr. Nabb and Mr. Hiller and Mr. Heilmann to give me
- 13 an answer regarding your specific departments. Has WMATA, meaning
- 14 TSSM, vehicle engineering, or engineering support services, has
- 15 WMATA found a common element between the 2005 Rosslyn incident,
- 16 the 2009 Potomac Avenue incident and the 2009 Fort Totten
- 17 incident? Mr. Nabb.
- 18 MR. NABB: Based upon the fact that I was only involved
- 19 in two of the incidents -- I was not in a position to directly be
- 20 involved in the 2005 incident, my understanding is that there was
- 21 commonality from the standpoint that the system failed to perform
- 22 in a failsafe manner. From a technical perspective, I don't have
- 23 the direct knowledge that are those events related.
- MR. PAYAN: Mr. Hiller.
- 25 MR. HILLER: Speaking specifically to the 2009 Potomac

1 Avenue and the 2009 June 22 accident, I can tell you that there is

- 2 no commonality, as you phrase it, with those two incidents. I
- 3 can't speak to the 2005.
- 4 MR. PAYAN: Thank you. Mr. Heilmann.
- 5 MR. HEILMANN: All three incidents have something in
- 6 common, but it's a broad brush. All three incidents were failures
- 7 of a failsafe system, the automatic train protection system in an
- 8 unsafe failure mode. In the case of the Rosslyn incident, the
- 9 loss of train detection is a common element that we see at Fort
- 10 Totten, loss of train detection also there. At the Rosslyn
- 11 incident, the loss of train detection was attributed to the cables
- 12 as the most probable cause. In the case of Fort Totten, the loss
- 13 of train detection was attributed to the communication of that
- 14 parasitic oscillation that we referred to.
- 15 In the case of the Potomac Avenue March 2 occurrence,
- 16 2009, the most probable cause was the slow release of a vital
- 17 relay on board the train, but that one is also an ATP failsafe
- 18 violation, but in that case, we had to have simultaneously a
- 19 failure of a non-vital system, the program station stopping system
- 20 aboard the train, or the train would have stopped at the platform
- 21 and we would not have known about the failure of the relay.
- The Rosslyn incident may have been, there's no way to
- 23 confirm this, may have been parasitic oscillation also. We do
- 24 know that during the Rosslyn incident, during the initial
- 25 investigation of the Rosslyn incident, we dug into historical

- 1 records and the problem had been there for a long time but we
- 2 don't know that the cable did not cause it.
- 3 MR. PAYAN: Thank you. Mr. Chairman, I have just one
- 4 more topic, but I'll defer to the Board of Inquiry, whether I
- 5 should proceed.
- 6 CHAIRMAN SUMWALT: We will -- yes, so you're through
- 7 with your line of questioning for now; is that correct?
- 8 MR. PAYAN: Yes. My only additional would be the loss
- 9 of shunt tool changes that have been implemented.
- 10 CHAIRMAN SUMWALT: Yeah, let's get into that tomorrow,
- 11 and so I want to make sure the witnesses, you're all local. It's
- 12 not a problem from a travel perspective for you to come back
- 13 tomorrow; is that correct? Each of you can be back here tomorrow?
- 14 I know you only bargained to be here for today, but we sincerely
- 15 appreciate your testimony. This is very valuable to helping the
- 16 Safety Board complete our investigation.
- 17 So what we will do is we will be adjourned. However, in
- 18 the morning, I want to make it known that we will start at 8:00 in
- 19 the morning. We will start at 8:00 in the morning, and the
- 20 boardroom will open at 7:00. The boardroom opens an hour before
- 21 we start.
- 22 So the witnesses are released for the day. We will
- 23 reconvene at 8:00 in the morning, and we are in recess.
- 24 (Whereupon, at 6:14 p.m., the hearing was adjourned to
- 25 reconvene on Wednesday, February 24, 2010, at 8:00 a.m.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: PUBLIC HEARING ON THE COLLISION OF TWO

WASHINGTON METROPOLITAN AREA TRANSIT

AUTHORITY TRAINS NEAR FORT TOTTEN

STATION, WASHINGTON, D.C., JUNE 22, 2009

PLACE: Washington, D.C.

DATE: February 23, 2010

was held according to the record, and that this is the original, complete, true and accurate transcript which has been compared to the recording accomplished at the hearing.

Dan Hawkins Official Reporter